

# **SUSTAINABLE DEVELOPMENT FINANCING: PERSPECTIVES FROM ASIA AND THE PACIFIC**

**BACKGROUND PAPER<sup>\*</sup>**

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## I. Introduction

1. Financing for sustainable development has become a significant and integral part of the current development discourse in the United Nations' post-2015 development agenda. To secure the *future we want* it is critical “to facilitate the mobilization of resources and their effective use in achieving sustainable development objectives.”<sup>1</sup>

2. On 18 June 2013, the United Nations General Assembly decided to establish an intergovernmental committee of experts on sustainable development financing, as recommended in the outcome document of Rio+20.<sup>2</sup> The Committee's report would “assess financing needs, consider the effectiveness, consistency and synergies of existing instruments and frameworks and evaluate additional initiatives” and conclude its work by 2014 (para 255, A/Res/66/288).<sup>3</sup> The Expert Committee has made substantial progress and the regional outreach on sustainable financing is intended to offer perspectives on Asia and the Pacific financial market developments and some key issues and challenges facing the region in financing the region's sustainable development and other priorities.

3. The work of the Committee is proceeding in parallel with the deliberations of the Open Working Group (OWG) of the General Assembly, established on 22<sup>nd</sup> of January 2013 by decision 67/555. The OWG has emphasized the need to ensure adequate financial resources for investments in sustainable development, *inter alia*, through (i) strengthening domestic resource mobilization, including by improving tax collection and the efficiency of public spending and by strengthening systems to harness domestic savings for investment, (ii) the full implementation by developed countries of ODA commitments in line with the agreed formulae and timetable; and (iii) the mobilization of additional financial resources from multiple sources.<sup>4</sup>

4. The rest of the paper is organized as follows. Section 2 provides key considerations of financing sustainable development. Section 3 outlines the financing requirements. Domestic resource mobilization issues are discussed in section 4, after which section 5 presents ways in which capital markets can be broadened and deepened in the region. Section 6 deals with financial inclusion and section 7 describes how to leverage public-private partnerships. Section 8 illustrates innovations in climate finance. Section 9 provides various ways to mobilize external resources. Section 10 highlights the importance of trade finance, especially for small and medium size enterprises and section 11 emphasizes the importance of South-South and triangular development cooperation. Finally, section 12 concludes.

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<sup>1</sup> See General Assembly resolution 66/288. Available from [www.uncsd2012.org/](http://www.uncsd2012.org/).

<sup>2</sup> See General Assembly resolution S-19/2, annex. Available from [www.un.org/ga/](http://www.un.org/ga/).

<sup>3</sup> General Assembly resolution 67/203 of 21 December 2012 specified that the intergovernmental committee should update the GA on the progress of its work before the beginning of the sixty-eight session of the Assembly. This resolution as well as General Assembly resolution 67/199 titled “Follow-up to the International Conference on Financing for Development” of 21 December 2012 stressed the need to reinforce coherence and coordination and to avoid duplication of efforts with regard to the financing for development process.

<sup>4</sup> For further information on the 11<sup>th</sup> session of the Open Working Group, see [http://sustainabledevelopment.un.org/content/documents/3686WorkingDoc\\_0205\\_additional supporters.pdf](http://sustainabledevelopment.un.org/content/documents/3686WorkingDoc_0205_additional supporters.pdf).

## II. Key consideration of financing for sustainable development

5. As member States define the contours of the development agenda beyond 2015, the sources and uses of mobilizing resources and their proper allocation have taken centre stage. The implementation of a new, ambitious development agenda with sustainable development at its core requires more effective incentives, a more effective allocation of existing resources and additional funds from domestic, external and innovative sources.

6. The focus on sustainable development introduces new dimensions and challenges to the development financing dialogue. In line with the basic precepts of sustainable development, sustainable development financing must be aligned with development outcomes which integrate and synergize the three dimensions of sustainable development, i.e. the economic, social and environmental dimensions, as outlined in the Rio+20 outcome document, to ensure intra- and intergenerational equity, as well as recognize planetary boundaries.

7. There is now a global interest in understanding institutional mechanisms and modalities for leveraging new, emerging and innovative sources of financing from a variety of domestic and external sources. As noted in United Nations General Assembly resolution 65/1, such sources of finance should be stable and predictable and they should supplement – and not substitute – traditional sources of finance.<sup>5</sup> In the light of the insufficient funding available from traditional sources of development finance, policymakers have to consider the mobilization of emerging and innovative sources of financing.

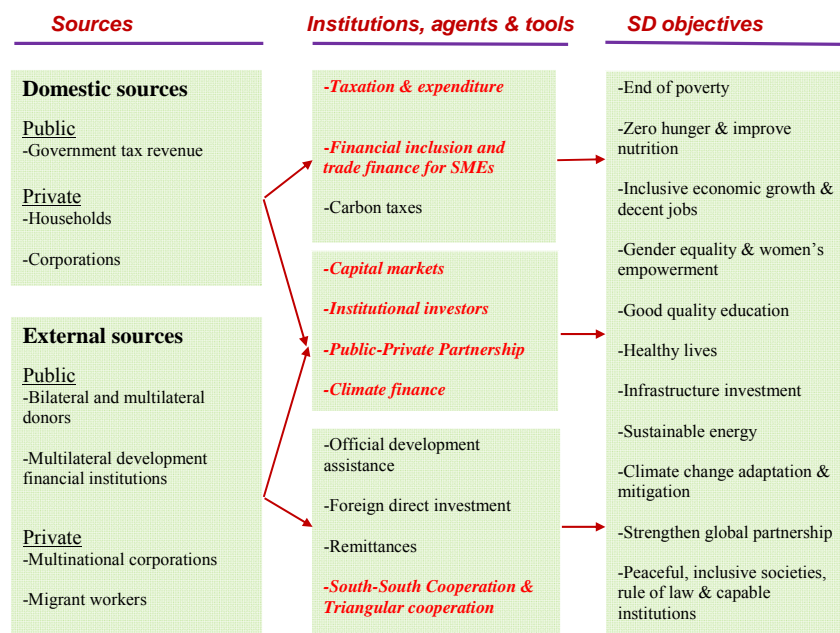
8. This is particularly important because of the need to fund necessary but expensive developmental expenses, such as for closing infrastructure gaps within and across countries in the region and for addressing the impacts of climate change. For such purposes, the creation of appropriate institutional and regulatory frameworks for the development of domestic capital markets and for supporting the development of domestic institutional investors, for example, could help mobilize much needed additional financial resources.

9. *The schematic view of financing for sustainable development, around which this paper is organized, is offered in Figure 1.* The paper examines both domestic and external funding sources and also looks at public and private sources. There is need to reflect on how resource mobilization from these sources can be catalysed to meet growing and emerging requirements, and how public funds can leverage private funds to finance sustainable development.

10. Once adopted, the new and ambitious agenda with sustainable development at its core requires more tailored approaches, modalities and incentives. While the mobilization of resources through existing and new sources of domestic, external and innovative financing is challenging, there is also a need for deploying resources efficiently towards the right sustainable development outcomes.<sup>6</sup>

<sup>5</sup> See General Assembly resolution 65/1. Available from [www.un.org/en/mdg/summit2010/pdf/mdg%20outcome%20document.pdf](http://www.un.org/en/mdg/summit2010/pdf/mdg%20outcome%20document.pdf).

<sup>6</sup> See the work of the Leading Group on Innovative Financing for Development, the Task Force on International Financial Transactions for Development and the Task Force on Innovative Financing for Education. See also United Nations, *Innovative Financing for Development: the I-8 Group Leading Innovative Financing for Equity [L.I.F.E.]* (New York, 2009). The report highlighted that eight innovative finance mechanisms including UNITAID, IFFIm–GAVI, Advance Market Commitments, the Voluntary Solidarity Contribution for UNITAID, (product) RED and the Global Fund, Debt2Health, Carbon Market and Socially Responsible Investments.

**Figure 1.** A schematic view of the sources of financing for sustainable development

Source: ESCAP.

Note: Sustainable development objectives are based on the Working Document of the Open Working Group on the Sustainable Development Goals, which is available from the following website: [http://sustainabledevelopment.un.org/focussdgs.html#\\_edn33](http://sustainabledevelopment.un.org/focussdgs.html#_edn33); United Nations, *The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda* (New York, 2013); and ESCAP/ADB/UNDP, *Asia-Pacific Regional MDGs Report 2012/13* (Bangkok, 2013).

11. The sustainable development agenda, as it is emerging, will require significant investments in public goods, such as social services, clean air, water and the continued flow of ecosystem services, upon which economies and people depend.<sup>7</sup> The funding of such investments, which are characterized by high social rates of return but low private rates, is more likely to originate and be leveraged from public domestic resources.

12. To fund necessary but expensive developmental expenses to close infrastructure gaps within and across countries in the region and to address the impacts of climate change, supportive public finances and domestic capital markets are required. In addition, innovative sources of finance such as carbon taxes, diaspora bonds and financial transaction taxes could be drawn upon.<sup>8</sup>

13. In going forward it is important that the Governments in Asia-Pacific economies be cautious about the potential macroeconomic challenges of funding inclusive and sustainable development by maintaining fiscal sustainability and price stability. As part of a development-oriented macroeconomic framework, policymakers have an obligation to

<sup>7</sup> The Working Document of the Open Working Group on the Sustainable Development Goals (SDGs). Available from [http://sustainabledevelopment.un.org/focussdgs.html#\\_edn33](http://sustainabledevelopment.un.org/focussdgs.html#_edn33); United Nations, *The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda* (New York, 2013); and ESCAP/ADB/UNDP, *Asia-Pacific Regional MDGs Report 2012/13* (Bangkok, 2013).

<sup>8</sup> World Bank, *Financing for Development Post-2015* (Washington D.C., 2013). Available from <http://www.worldbank.org/>

manage domestic and external public debt in a prudent manner so as to minimize adverse effects on inflation, the exchange rate, interest rates and growth for signs of any potential risks.

14. Furthermore, Governments may be concerned whether their growth would be sufficient to generate resources to keep public debt and inflation at manageable levels. Macroeconomic stability can be achieved as long as policies are designed carefully and implemented effectively. With several Governments already running fiscal deficits, greater attention must however be paid to public debt profiles in the region to better understand their macroeconomic implications. In particular, it is essential to understand the currency composition and the maturity of debt.

15. Generally, private capital inflows are highly concentrated in a small number of emerging economies. The development challenges facing these recipient countries differ substantively from those that do not receive such private resource inflows. For example, in most of the emerging developing economies, maintaining large and stable inflows is a priority, whereas in the countries with special needs, Governments need to put in place policy packages to encourage more inflows of resources. Therefore, macroeconomic policy responses in these two distinct settings will clearly differ. Moreover, experience shows that Governments in low income and vulnerable economies have in general been unable to attract significant foreign private financial resources due to weak domestic market regulations and lack of infrastructure. These economies, therefore, need ODA to supplement existing resources.

16. The goals of an Asia-Pacific model of financing for sustainable development are to:<sup>9</sup>

- prioritize investments that integrate the economic, social and environmental dimensions of sustainable development;
- promote inclusive and resource-efficient growth to reduce inequality, decent jobs and overall economic efficiency through an appropriate resource allocation for zero income poverty and zero hunger and malnutrition;
- strengthen investments in public goods by increasing financial resources in the quality of education, health services and social protections systems;
- catalyse long-term finance for sustainable infrastructure investment including in areas of water and sanitation, transportation services and energy access;
- strengthen market incentives and financing access for sustainable energy investments and climate mitigation and adaptation;
- strengthen governance structures to minimize and manage risks, and to guarantee effective institutional mechanisms to attain socially responsible goals of good growth, social fairness and environmental sustainability;
- close the “price gaps” related to the current externalization of social and environmental values in markets, including through taxation reform; and
- close the “time gaps” – provide financing and incentives to encourage investments that yield long-term social and environmental benefits.

<sup>9</sup> United Nations, *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development* (New York, 2013). Available from [www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf](http://www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf). ESCAP-ADB-UNDP, *Asia-Pacific Regional MDGs Report 2012/13* (Bangkok, 2013). Available from [www.unescap.org/sites/default/files/MDG-Report2012-2013%28lowres%29\\_0.pdf](http://www.unescap.org/sites/default/files/MDG-Report2012-2013%28lowres%29_0.pdf).

### III. Financing requirements for sustainable development in the Asia-Pacific region

17. Home to two thirds of the world's poor, the Asia-Pacific region faces enormous development challenges, the financing of which requires new and innovative institutions, agents and tools.<sup>10</sup> This section provides a brief overview of recent estimates of the region's needs to finance its sustainable development agenda. These estimates are at best underestimates as the actual size of financing requirements is quite large given the size of Region and presence of large countries, the subregional diversity in terms of the level of development and the state of infrastructure.

18. Despite these characteristics, the potential for mobilizing resources from domestic and external sources is large, yet also often constrained by the borrowing and absorptive capacity of many countries resulting from regulatory and institutional barriers. This is especially the case in the countries with special needs (CSN), comprising least developed countries, landlocked developing countries and small island developing States.<sup>11</sup>

19. In 2013, ESCAP estimated that the Asia-Pacific region needs between \$500 billion and \$800 billion per annum merely to close development gaps in the areas of education, health, employment, social protection and access to energy services between 2013 and 2030.<sup>12</sup> The cost estimates were prepared for 10 countries which account for over 80% of the population and 80% of GDP of the developing Asia-Pacific region. These countries were Bangladesh, China, Fiji, India, Indonesia, Malaysia, Philippines, the Russian Federation, Thailand and Turkey.<sup>13</sup>

20. Countries with special needs would require relatively more resources than other to implement inclusive and sustainable development agenda. For example, Bangladesh and Fiji would require on average about 16.4% and 9.9% of their GDP respectively over the period 2013-2030 to provide universal access to modern energy services, compared with an average of 8.2% of GDP for other countries in the region (see figure 2).

21. Notwithstanding the significant investment requirements to tackle social development challenges, infrastructure is a further critical component of sustainable development. The ADB has estimated that the region would need \$800 billion per year to close its infrastructure gaps by 2020.<sup>14</sup> A more recent World Bank study estimated that the South Asian subregion alone would need between \$1.7 trillion and \$2.5 trillion to close its infrastructure gaps by 2020 (see figure 3).<sup>15</sup>

<sup>10</sup> ESCAP estimates that 763 million people lived below the \$1.25/day poverty line in the Asia-Pacific region in 2011.

<sup>11</sup> UN System Task Team on the Post-2015 UN Development Agenda, "Countries with special needs", (OHRLLS, 2012). Available from

[www.un.org/millenniumgoals/pdf/Think%20Pieces/1\\_countries\\_with\\_special\\_needs.pdf](http://www.un.org/millenniumgoals/pdf/Think%20Pieces/1_countries_with_special_needs.pdf).

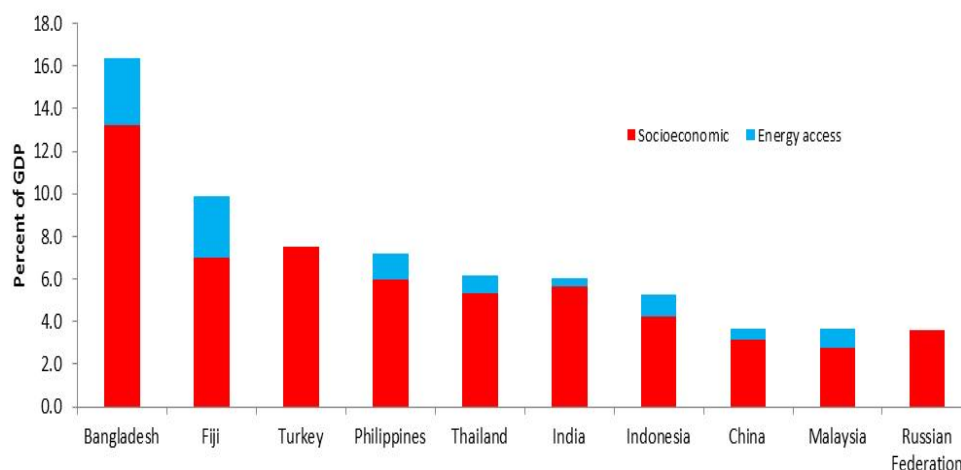
<sup>12</sup> ESCAP, *Economic and Social Survey of Asia and the Pacific* (Sales No. E.13.II.F.2). Available from [www.unescap.org/publications/survey/surveys/survey2013.pdf](http://www.unescap.org/publications/survey/surveys/survey2013.pdf).

<sup>13</sup> In an earlier study, ESCAP estimated that the region needed \$639 billion per annum to attain the Millennium Development Goals by 2015. See ESCAP, *Financing an Inclusive and Green Future* (Bangkok, 2010). Available from [www.unescap.org/sites/default/files/themestudy2010-fulltext.pdf](http://www.unescap.org/sites/default/files/themestudy2010-fulltext.pdf).

<sup>14</sup> Asian Development Bank, *Infrastructure for a Seamless Asia* (Manila, 2009). Available from [www.adbi.org/files/2009.08.31.book.infrastructure.seamless.asia.pdf](http://www.adbi.org/files/2009.08.31.book.infrastructure.seamless.asia.pdf).

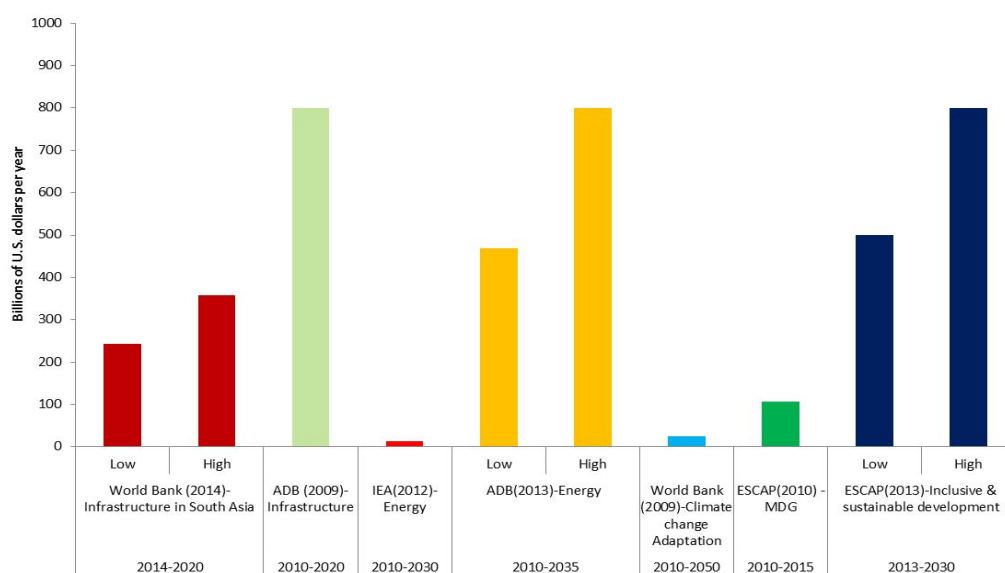
<sup>15</sup> World Bank, *Reducing Poverty by closing South Asia's Infrastructure Gap* (Washington, D.C., 2014).



**Figure 2.** Total Investment requirement in selected Asia-Pacific economies, 2013-2030

Source: ESCAP (2013). Economic and Social Survey of Asia and the Pacific. Available from [www.unescap.org/publications/survey/surveys/survey2013.pdf](http://www.unescap.org/publications/survey/surveys/survey2013.pdf).

22. The discussion below offers insights and perspectives of the cost of financing in selected areas of sustainable development. Recently, ESCAP estimated that the cost of investment projects in selected areas of transport exceeded \$350 billion per year. This is due to large demand for investment in the transport sector in terms of infrastructure and services, as well as for maintenance (see box 1).<sup>16</sup>

**Figure 3.** Key estimates of annual financing requirements in Asia-Pacific economies

Source: See references shown in the figure for details of the methodology of cost estimations and website information on the reports.

Note: Estimates show annual financing requirements to achieve various development and infrastructure goals.

<sup>16</sup> ESCAP, *Review of Developments in Transport in Asia and the Pacific 2013: Transport as a Key to Sustainable Development and Regional Integration* (Bangkok, 2013).

## Box 1: Transport financing requirements

Traditionally, domestic public resources have been the main source of funding, together with external assistance received from donor countries or loans from international finance institutions, which are particularly important for the poorer countries in the region. The World Bank and Asian Development Bank lending for transport projects in the Asia-Pacific region is about \$7 billion per year.

While financing domestic infrastructure is challenging, funding regional projects is even more difficult. Indeed, regional projects are by nature more complex than national ones as they require higher coordination efforts and the value they generate is achieved only if all parties fulfil their part of the work. The costs and impacts of regional projects may also be unevenly distributed among the participants, thereby resulting in further complexities and differing levels of commitment.

In transport, the Asian Highway and the Trans-Asian Railway networks are two key regional infrastructures. However, owing to insufficient investments, these networks operate below their potential. For instance, although substantial efforts have been made to upgrade the Asian Highway network, 12,000 km of roads still do not meet minimum quality standards. Such poor road quality can act as a deterrent for international transport due to the resulting high vehicle operating costs or long journey times, thereby reducing the economic opportunities that could result from better connectivity. Furthermore, in order to improve efficiency of road transport operation and cater for economic and trade growth, the road sections that meet Asian Highway standards also need to be upgraded to higher standards. Upgrading different classes of the Asian Highway network to higher quality standards would need a considerable amount of investment, which is estimated at \$36 billion.<sup>a</sup> Similarly, there are currently an estimated 10,900 km of missing links in the Trans-Asian Railway network, i.e. 9% of the identified network.<sup>b</sup> These missing links prevent countries in the region from reaping the full benefit of increased use of rail for the international transport of goods. Constructing these missing links is however costly (ESCAP has estimated that approximately \$59 billion is necessary for completing these missing links.)

Recognizing the importance of regional transport connectivity, some countries in the ESCAP region have provided financial assistance to other member countries to support them in developing their part of regional infrastructure. This intra-Asian cooperation has emerged as a growing source of infrastructure financing and has been done mainly on bilateral basis.<sup>c</sup> Developing dedicated mechanisms for addressing critical regional infrastructure gaps might however be necessary to ensure that sufficient funds are allocated to transport projects that could be beneficial for the whole region.

<sup>a</sup> Upgrading 12,000 km of below class III to class III standards would require \$ 3.5 billion, strengthening pavement of 31,500 km of class III roads to asphalt concrete (class II) without widening and geometrical improvements would require \$ 7 billion and upgrading 45,500 km (excluding roads mountainous and hilly terrain) of class II road to four-lanes (class I) standards would require \$25.5 billion.

<sup>b</sup> “Missing links” are defined as the absence of continuous rail infrastructure between the railway networks of neighbouring countries or the absence of continuous railway infrastructure within one country, often due to local geography.

<sup>c</sup> ESCAP, *“Review of Developments in Transport in Asia and the Pacific 2013: Transport as a Key to Sustainable Development and Regional Integration* (Bangkok, 2013).

Source: ESCAP.

23. More than 56% of the population in the Asia-Pacific region is expected to live in urban areas by 2030.<sup>17</sup> This raises an urgent need for cities to mobilize additional revenues in order to meet the challenges that they face due to such unprecedented urbanization and to fill gaps in investment that threaten to undermine the transition from low- and middle-income status.

24. Also, greater attention must be paid to investment in mitigation and adaptation to climate change if the region’s cities are not to be overwhelmed by the financial and other

<sup>17</sup> ESCAP Online Statistical Database. Available from [www.unescap.org/stat/data/statdb/DataExplorer.aspx](http://www.unescap.org/stat/data/statdb/DataExplorer.aspx) (accessed on 4 June 2014).

implications of climate change and associated environmental impacts, including the quality of life of their citizens (see box 2).

#### Box 2: Financing urban infrastructure in Asia and the Pacific

Urbanization in large part has driven the region's growth – but huge urban infrastructure deficits are undermining its competitiveness. Rapid urbanization has been the key driver of Asia's dynamic growth – and of the poverty reduction that has resulted. However, infrastructure development has not kept pace with urbanization, and cities in the region are facing serious infrastructure deficits which would require total investments of about \$60 billion a year.<sup>a</sup> The economic cost of inadequate infrastructure is not only high, but is also beginning to threaten the competitiveness and productivity of national economies and the region overall. For example, current urban infrastructure deficit costs in India are about 4.3% of its GDP per year, and a massive \$1.2 trillion is needed as investment for current gaps, and to meet the requirements of future urban populations.<sup>b</sup>

The region's cities may be economic heavyweights, but they are also fiscal lightweights. While cities in Asia and the Pacific are the “engines of growth”, with urban areas contributing 80% of GDP in the region in 2011, most of them are not able to raise the resources required to finance the infrastructure they need. Cities, even megacities, are still overly dependent on national and state/provincial government transfers. Despite decentralization, data of the International Monetary Fund show that local governments are *less* self-sufficient today than they were 15 years ago.<sup>c</sup> National Governments have not transferred funds or enabled access to finance to match service delivery responsibilities. In addition, the ability of local governments to raise their own revenues is extremely limited and cost recovery on service delivery is lacking. An additional obstacle is that local government is limited in its ability to access capital markets. This is especially the case for the region's secondary and medium-sized towns and cities – where the majority of urban growth is occurring.

Investment needs will increase as a result of climate change and environmental debasement. In addition to the above challenges, a new set of funding requirements is looming as a result of the need to respond to the environmental impacts of rapid development and to mitigate and adapt to climate change. For example, it is estimated that Bangladesh would require an additional \$2.67 billion up to 2050 to “climate proof” infrastructure in major towns.<sup>d</sup> It is important to note that in any case the cost of adaptation is a fraction of the costs that countries would incur if no action is taken. Yet, local governments have neither the mandate to fund, nor access to the funds needed, to foster a sustainable economy or even to put in place the infrastructure that their cities need. This is inclusive of investment in both “hard” and “soft” infrastructure, including the need to invest in ecosystem integrity as adaptation to the projected impacts of climate change.

<sup>a</sup> Asian Development Bank, *Managing Asian Cities* (Manila, 2008).

<sup>b</sup> McKinsey & Company (2011). *Building India: Transforming the Nation's Logistics Infrastructure*.

<sup>c</sup> L. Gadenne and M. Singhal, “Decentralization in developing economies”, Working Paper, No. 19402, (Cambridge, MA: National Bureau of Economic Research, 2013).

<sup>d</sup> World Bank, “Climate proofing infrastructure in Bangladesh: the incremental cost of limiting future inland monsoon flood damage”, Policy Research Working Paper, No. 5469 (Washington, D.C., 2010).

Source: ESCAP.

25. For environment-related investments in the Asia-Pacific region, the International Energy Agency (IEA) estimated that investment of nearly \$14.3 billion per year (from 2011 to 2030) would be required to achieve universal energy access by 2030 for the Asia-Pacific region.<sup>18</sup> Similarly, according to the World Bank, the costs for adaptation to climate change

<sup>18</sup> International Energy Agency, *World Energy Outlook: Energy for All – Financing Access for the Poor* (Paris, 2011). Available from

[www.worldenergyoutlook.org/media/weowebsite/energydevelopment/weo2011\\_energy\\_for\\_all.pdf](http://www.worldenergyoutlook.org/media/weowebsite/energydevelopment/weo2011_energy_for_all.pdf). IEA estimated that average annualized additional investment would amount to \$910 billion for mitigation through 2050, while the World Bank estimated the amount to be about \$100 billion for the same period. Climate Policy Initiative, *The Global Landscape of Climate Finance 2013* (San Francisco, 2013).

would amount to \$25 billion annually from 2010 to 2030.<sup>19</sup> Furthermore, Asia and the Pacific remains the most disaster prone region of the world, but efforts on disaster risk finance have had mixed success (see box 3).

Box 3: Disaster risk financing — success amid much failure

While Asia and the Pacific remains the most disaster prone region of the world, efforts on disaster risk finance have had mixed success. The common approach has been for Governments to set aside contingency funds for various emergencies, and calamity funds especially for disasters. To avoid moral hazard, such funds should only cover risks that cannot be absorbed by private insurance — such as disaster-related damage affecting small farmers and the urban poor who are unable to afford private insurance.<sup>a</sup> However, due to the specific nature of covariant risks related to disasters, private sector insurance penetration is quite weak and uneven in developing countries in the region. Other issues, such as adverse selection and moral hazard, continue to plague indemnity-based insurance systems, and future climate risks appear to be contributing to increased insurance losses and, in some cases, uninsurability. Two successful modalities of disaster risk financing have emerged in recent years that may warrant further analysis and broad-based application:

First, parametric insurance, where payouts are linked to an occurrence of a triggering event (such as rainfall, temperature and snow indices) as opposed to traditional insurance where the payouts are linked to actual damage (such as crop losses), has proven effective. Index-based livestock insurance in Mongolia is a case in point.<sup>b</sup> In India, the Agriculture Insurance Company has successfully launched an index insurance product in Haryana and Punjab states to cover wheat crops, using earth observation satellite products as the basis for determining the triggering event.<sup>c</sup> The Regional Drought Mechanism of ESCAP provides satellite-based drought indexing, which could be used for developing parametric insurance products. Many of the challenges faced by conventional insurance systems are absent in the case of parametric insurance, and it can be a cost-effective alternative as seen in the above cases. Parametric insurance has proven ideal for low-frequency but high-intensity losses, especially weather-related risks in agriculture.

Second, regional cooperation has been demonstrated to be effective, especially in risk pooling among smaller developing countries. Many small economies do not have the capacity to absorb financial losses caused by natural disasters, nor do their limited budgetary capacities enable them to build up sufficient contingency reserves. Furthermore, they have limited access to catastrophe insurance due to the limitations of risk pooling because of the small scale of business. In the South Pacific, the average annual direct losses caused by natural disasters were estimated at \$284 million, and are expected to rise. The Pacific island countries have recently launched a regional insurance pooling facility — the Pacific Catastrophe Risk Assessment and Financing Initiative with the support of the World Bank and the Secretariat of the Pacific Community. The pilot programme, funded principally by the Government of Japan, successfully put in place the catastrophe insurance that covers cyclone and earthquake risks, including tsunami triggered by earthquakes. Six Pacific island economies, namely the Cook Islands, Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu, are participating. The coverage is expected to be \$45 million in the first phase. The financial analysis carried out showed that a regional risk pooling mechanism would generate savings of up to 50% compared with individual risk-transfer solutions.

<sup>a</sup> ESCAP, *Building Resilience to Natural Disasters and Major Economic Crisis* (Bangkok, 2013).

<sup>b</sup> Olivier Mahul and Jerry Skees, “Managing agricultural risk at the country level: the case of index-based livestock insurance in Mongolia”, [Policy Research Working Paper, No. WPS 4325](#) (Washington, D.C., World Bank, 2008).

<sup>c</sup> International Fund for Agricultural Development and World Food Programme, *The Potential for Scale and Sustainability in Weather Index Insurance for Agriculture and Rural Livelihoods* (Rome, 2010). Available from [www.ifad.org/ruralfinance/pub/weather.pdf](http://www.ifad.org/ruralfinance/pub/weather.pdf).

Source: ESCAP.

<sup>19</sup> World Bank, *Economics of Adaptation to Climate Change - Synthesis Report* (Washington, D.C.) Available from <http://documents.worldbank.org/curated/en/2010/01/16436675/economics-adaptation-climate-change-synthesis-report>.

26. The region needs to invest between \$11.7 trillion and \$19.9 trillion until 2035 in order to modernize its energy sector, including adaptation of new technologies and renewable forms of energy.<sup>20</sup> While the various estimates of the region's financial needs are not additive, there is little doubt that significant resources are needed for the region to develop in a sustainable way.

27. It should be noted that closing infrastructure gaps, providing energy access, and climate adaptation and mitigation projects have significant potential for generating savings and economic returns which could further supplement sustainable development investments.

28. In sum, various available estimates illustrate that it could cost as much as \$2.5 trillion per year to close the Asia-Pacific region's infrastructure gaps, provide universal access to social protection, health and education, and implement climate change mitigation and adaptation measures.

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<sup>20</sup> Asian Development Bank, *Energy Outlook for Asia and the Pacific* (Manila, 2013). Available from [www.adb.org/sites/default/files/pub/2013/energy-outlook.pdf](http://www.adb.org/sites/default/files/pub/2013/energy-outlook.pdf).

## IV. Mobilizing domestic resources

29. Mobilizing domestic resources to increase financing for development is a key pillar in the development agenda beyond 2015. An important component of this will be for Governments to raise the resources that are required to invest in sustainable development. Governments have several options to unlock the fiscal space for such spending. They can, for example, increase their borrowing, either domestically or from abroad. They can also create fiscal space by making existing public expenditure more efficient and/or by reprioritizing public expenditure to make it more development-oriented. Countries can also mobilize domestic resources by strengthening tax and non-tax revenues.

### A. Scope for domestic taxation

30. There is significant potential for increasing tax revenues in the Asia-Pacific region.<sup>21</sup> The collection of tax revenues in the developing countries of Asia and the Pacific is low, not only compared with developed regions or countries, such as the European Union or the United States of America, but also compared with other developing regions. In 2011, the average tax-to-GDP ratio in Asia and the Pacific was only 14.8% 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. In the same year, the average tax revenue of the general Government was 16.9% of the GDP for the region's developing economies, compared with 24.2% for its developed economies. As shown in figure 4, only seven countries, four of which are resource-rich, collected tax revenues of more than 20% of GDP – and some had tax-to-GDP ratios in the single digits. This is problematic in the light of the positive relationship between tax collection and development.

31. There are several reasons why tax-to-GDP ratios are low in the region. First, personal income taxes are still at an early stage of development. One reason is that a large proportion of the labour force is employed in the informal sector or in agriculture, where it is usually untaxed. Moreover, in many countries, wealthier individuals avoid or evade tax payment. In Bangladesh, for example, only about 1% of the population pays income tax; in India the proportion is only 3%. In Pakistan less than 1% of the population filed an income tax return in 2011.

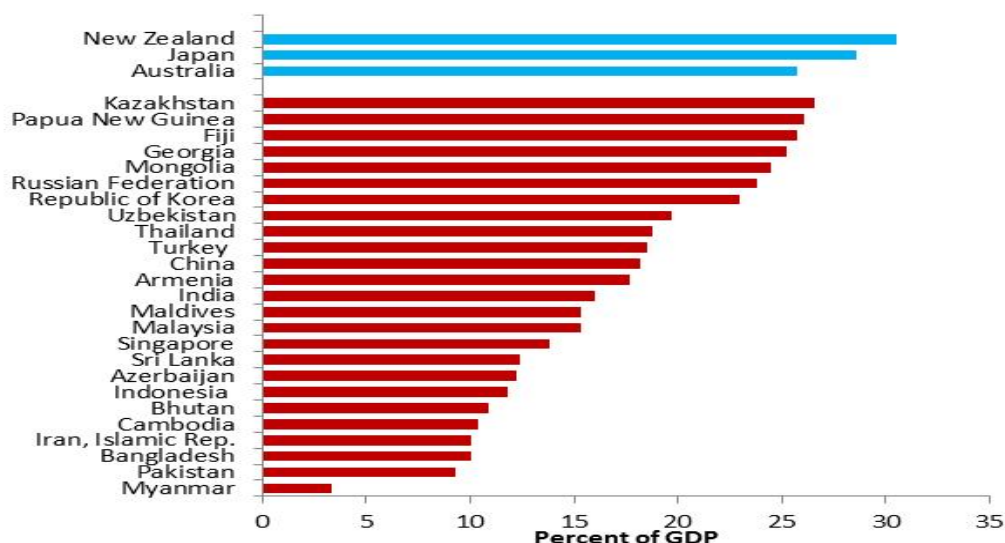
32. An important element to increase tax-to-GDP ratios will be taxing capital gains more effectively, which is currently seldom the case. This may arise from the difficulty in valuing capital gains, but is more likely due to the potential negative impact on competitiveness vis-à-vis countries that do not have such a tax. However, mechanisms for taxing capital gains in securities or property have been developed by some countries and could be more widely implemented. For instance, investment income is taxed at a flat withholding rate of 20% in China. One possibility would be to introduce dual income tax systems which not only impose increasing marginal rates on income but also taxes income on labour and capital separately. Doing so would enable greater flexibility to address global tax competition in order to attract capital. However, in most developing countries tax systems do not treat labour and capital income separately. Clearly, the complexity of dual tax systems raises many challenges,

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<sup>21</sup> See for further discussion, ESCAP, *Shifting from Quantity to Quality: Growth with Equality, Efficiency, Sustainability and Dynamism* (Bangkok, 2013). Available from [www.unescap.org/sites/default/files/Shifting%20from%20quantity%20to%20quality.pdf](http://www.unescap.org/sites/default/files/Shifting%20from%20quantity%20to%20quality.pdf).

including separation of labour and capital incomes. Further work is therefore needed on the suitability of such a system for developing countries and how to overcome difficulties in its implementation.

**Figure 4.** Tax-to-GDP ratios in selected Asia-Pacific economies, 2011



Source: IMF, Government Finance Statistics (GFS). Available from [www.imf.org/external/data.htm](http://www.imf.org/external/data.htm).

Notes: Data from Armenia, China, Australia, India, the Islamic Republic of Iran, Kazakhstan, Mongolia, New Zealand, the Republic of Korea, the Russian Federation, Thailand, and Turkey pertain to general government tax revenues, for other countries data is for central government tax revenues.

33. Second, many countries have shifted from taxation of trade to taxation on goods and services by introducing and expanding value added taxes (VAT) or general sales taxes (GST). Between 1990 and 2014, VAT or GST revenue rose from less than a fifth of indirect tax revenue to about one half. Despite raising significant amounts of revenue, collection efficiency of VAT/GST is quite low in many countries, indicating tax exemptions and difficulties in implementation of the tax. ESCAP estimates that in China, collection efficiency is less than 50%. In Bangladesh, India, Malaysia and Pakistan, collection efficiency is less than 40%. In Indonesia, estimates of VAT “gaps” have been put at 50–60%.<sup>22</sup> Indeed, the additional revenue from these taxes has often been unable to offset declines in trade tax revenue. Also, a concern with VAT/GST is equity: as the poor spend a larger percentage of their income on consumption, these taxes have a relatively greater impact on the poor than on the rich.<sup>23</sup> Another concern is that the informal sector largely escapes the VAT net, discouraging businesses from making the transition to formal activities.

34. Third, in many Asia-Pacific countries, a large part of tax revenue is also eroded by exemptions and concessions as countries aim to promote investment and, in particular, attract foreign direct investment (FDI). These exemptions include policies such as tax holidays,

<sup>22</sup> ESCAP, *Economic and Social Survey of Asia and the Pacific* (forthcoming).

<sup>23</sup> It is possible to offset these effects to some extent by zero-rating or exempting certain goods and services. Indeed most countries have exemptions and lower rates for certain items such as food. However, the benefits of doing so must be weighed against increases in administrative costs.

reduced corporate income tax rates, investment tax allowances and partial profit exemptions to reduce the cost of capital.

35. In South-East Asia, for instance, these tax policies have been pursued extensively to encourage investment and to promote exports, research and development and skills training. In countries such as Indonesia, the Republic of Korea, Pakistan, Sri Lanka and Thailand, small companies are taxed at substantially lower rates, and some of these countries also offer preferential tax treatment for a whole sector – in Sri Lanka for tourism and construction, for insurance, and in Pakistan for power generation. Losses of revenue due to lower corporate income tax rates effectively being applied than the relevant statutory rate are equivalent to 0.5% of GDP in Georgia and 0.6% of GDP in the Philippines and Tajikistan.

36. Corporate tax concessions can be worthwhile if they lead to higher investment, especially in employment-intensive sectors and it may be useful to offer special incentives to foreign investors if they can offer technological or other forms of expertise not available in the country. However, preferential tax treatment for foreign investors distorts competition by putting local companies at a disadvantage; therefore, careful cost-benefit analyses are needed to evaluate the usefulness of such tax policies.

37. Tapping their tax potential fully could raise more than \$440 billion in tax revenues in 17 countries in the region, of which \$306 billion would be raised in developing countries. ESCAP research indicates that Governments in the region have great potential to strengthen tax revenues as a major source of domestic resources for financing sustainable development. Most economies in the region are currently collecting tax revenues below their potential. In several economies the tax potential is quite sizeable, amounting to several percentage points of GDP. In Afghanistan, Bangladesh, Bhutan, the Islamic Republic of Iran, Maldives and Singapore the tax potential is equivalent to between 5% and 7% of GDP. In Hong Kong, China, the tax potential exceeds 12% of GDP (see table 1). If economies would tap this potential, tax revenues would increase by 70% or more in several of them.

38. It has to be further recognized that some countries of the region are exploring innovative financing. For example, payments for ecosystem services are increasingly being explored in the region to create incentives for their sustainable use and conservation of natural resources. These have had a measurable impact on poverty rates and forest loss, for example in Viet Nam.<sup>24</sup> Policymakers are discussing other innovative and emerging sources of resource mobilization from both domestic (see box 4) and external sources that will decisively create momentum for sustained economic growth.<sup>25</sup>

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<sup>24</sup> P. Xuan and C. Santiago, “Vietnam leads Southeast Asia in payments for ecosystem services”. Available from [www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page\\_id=7593&section=news\\_articles&eod=1](http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=7593&section=news_articles&eod=1) (accessed 29 May 2014).

<sup>25</sup> See Communiqué Meeting of Finance Ministers and Central Bank Governors Sydney, 22-23 February 2014. Available from [www.g20.org](http://www.g20.org).



**Table 1.** Estimated tax potential in selected Asia-Pacific economies

Countries/areas	Year	Tax-to-GDP ratio (in % of GDP)		Tax gap	Tax gap in million United States dollars
		Actual	Potential		
Afghanistan	2011	8.8	15.0	6.2	\$1,268
Azerbaijan	2012	12.9	15.1	2.1	\$1,425
Bangladesh	2013	10.5	18.0	7.5	\$8,774
Bhutan	2009	9.2	16.0	6.7	\$120
Cambodia	2011	10.0	13.0	3.0	\$427
China	2012	19.4	21.2	1.8	\$150,153
Hong Kong, China	2011	14.2	26.7	12.5	\$32,928
Indonesia	2012	11.9	16.6	4.7	\$41,041
Iran (Islamic Republic of)	2013	5.8	13.1	7.2	\$40,013
Japan	2012	17.0	19.3	2.2	\$133,375
Malaysia	2012	16.1	17.4	1.3	\$3,881
Maldives	2010	10.7	16.5	5.8	\$129
Nepal	2013	15.2	16.1	0.9	\$163
Pakistan	2012	10.3	12.1	1.8	\$4,037
Philippines	2012	12.9	14.3	1.5	\$3,668
Singapore	2011	13.8	20.7	6.9	\$19,151
Thailand	2011	18.8	19.0	0.2	\$622

Source: ESCAP, *Economic and Social Survey of Asia and the Pacific 2014* (forthcoming).

Notes: The tax gap in column 5 is calculated by taking the difference between the estimated tax potential and the actual tax-to-GDP ratio for a given country/area in the year with the most recent data (listed in column 2). Only countries/areas with a positive tax gap are listed in this table.

#### Box 4: Innovative taxes for sustainable development in India

To fund the *Sarva Siksha Abhiyan* (education for all campaign), India started levying a 2% surcharge on income tax payable by any assessment, as education cess in India. This “tax on tax”, which is called *education cess* in India, has been used to fund universal access to good-quality basic education.

Similarly, the Central Road Fund was established by an Act of the Indian Parliament passed in 2000 in order to fund the development and maintenance of national highways, state highways and rural roads and for provision of roads over bridges and under bridges, and other safety features at unmanned railway crossings. The Fund is mobilized with a levy of a cess of Rs. 2 per litre imposed on petrol and high-speed diesel oil.

Source: ESCAP.

## B. Public expenditure management

39. Rationalization of public expenditure and more effective allocation and management could free significant resources for development. Governments could significantly scale up resources by improving expenditure management of their budgets. For instance, they could curb non-developmental expenditures, including defence expenditures, which for some countries in the region rank among the largest in the world. In 2013, the defence budget of the 10 highest ranked spenders globally reached \$1.1 trillion. Of this, half of the countries

were located in the Asia-Pacific region, accounting for 30%, equivalent to \$342 billion, of this expenditure.<sup>26</sup>

40. In some countries, including Bangladesh, China, Georgia, India, Pakistan, the Republic of Korea, the Russian Federation and Singapore, defence accounts for more than 10% of total public expenditure. In fact, defence expenditure often exceeds that on health and education combined. Clearly, countries could find ways to reduce such expenditure on non-development areas. This also includes other non-defence expenditure. For example, in the Pacific economies, the public sector is a major employer. In several countries in the region this leads to more than half of public expenditure being spent on salaries and wages. Capital expenditure and development-oriented expenditure is limited as a result. The underpinning reason is capacity constraints and weak institutions, which cause poor implementation, as well as reduce the potential for better planning, budgeting and execution over the medium term.

41. Significant resources are spent on subsidies. In South-East Asia alone, energy subsidies amounted to \$51 billion in 2012. Such subsidies present a drain on resources. In Uzbekistan and the Islamic Republic of Iran, for instance, energy subsidies in 2011 exceeded 50% of government revenue; in Turkmenistan they exceeded government revenues by more than a fifth.<sup>27</sup> In countries such as Bangladesh, Kyrgyzstan and Pakistan, energy subsidies consumed between a quarter and half of total government revenues, which often most benefit the wealthiest in society and are also environmentally harmful.<sup>28</sup> Subsidies on fuel alone reached nearly 2% of GDP in the fiscal year 2011/2012 in India; in 2011, energy subsidies exceeded 3% of GDP in Bangladesh, Brunei Darussalam, Indonesia and Pakistan and exceeded 5% of GDP in Kyrgyzstan, Turkmenistan and Uzbekistan.<sup>29</sup> Rationalizing subsidies is therefore a key reform to raise public resources for productive development investment in the region.

42. Removing or reducing subsidies is politically challenging; in many countries the removal of fuel and energy subsidies has sparked protests. Yet, doing so would make significant resources available for financing sustainable development. According to ESCAP estimates, savings from these subsidies would be sufficient to finance a comprehensive policy package comprising income security for the entire elderly population and all those with disabilities, as well as providing universal access to health and education in India and Bangladesh. In Pakistan and Indonesia, energy subsidies would, in addition, be sufficient to finance employment for everyone for 100 days per year, at a wage equivalent to the national poverty threshold.

43. Public resources for development could be raised by curbing illicit financial flows, including those related to tax evasion and avoidance. The Asia-Pacific region accounts for more than 60% of the estimated \$5.9 trillion that flowed out of developing countries illicitly or illegally between 2001 and 2010 to evade or avoid taxation.<sup>30</sup> Of the 10 countries with the largest illicit capital flows, 6 are in the Asia-Pacific region; of all least developed countries,

<sup>26</sup> The highest ranking country, the United States, accounted for 52%.

<sup>27</sup> IMF (2013), Energy subsidy reform: lessons and implications.

<sup>28</sup> The subsidy refers to the pre-tax subsidy for petroleum products, electricity, natural gas and coal, i.e. if the price paid by firms and households is below supply and distribution costs.

<sup>29</sup> IMF data.

<sup>30</sup> Dev Kar and Sarah Freitas, *Illicit Financial Flows from Developing Countries: 2001-2010* (Washington, D.C., Global Financial Integrity, 2012).

illicit outflows from Bangladesh are the largest, reaching \$35 billion between 1990 and 2008.<sup>31</sup>

44. One mechanism for avoiding tax payments is by mispricing trade, i.e. by overstating the value of imports or understating the value of exports. In doing so, profits can be transferred from one country to another, generally from high- to low-tax regimes. Estimates of such mispricing into the European Union and the United States between 2005 and 2007 include \$577 million for Pakistan, \$350 million for Bangladesh and \$475 million for Viet Nam.<sup>32</sup>

45. Similarly, multinational corporations can price transactions between subsidiaries in different countries to divert profits to low-tax countries and thereby minimize their tax liabilities. It is therefore necessary to develop mechanisms for proper apportionment of costs between the domestic and foreign operations of firms operating within countries so that there is no loss of tax revenues, especially in the presence of treaties for avoidance of double taxation. Already, about 20 Asian countries have adopted transfer-pricing rules in their tax laws, mostly based on OECD lines. For instance, Indian legislation prescribes five methods to compute the “arm’s length price”. In this regard, countries may also wish to consider some degree of harmonization of taxation of profits of multinational companies.

### ***Key issues and challenges***

46. To enhance tax revenues, especially in countries with significant untapped tax potential, the Governments in the Asia-Pacific region could opt for several innovative ways to strengthen value added taxes and capital gains; to harmonize income tax rates; to tackle tax evasion and make tax administrations more efficient; to broaden the tax base and rationalize tax rates to minimize welfare losses (see box 5). One objective is to avoid very high rates, which lead to disproportionate welfare losses and increase the incentive for tax evasion. Similarly, high tariffs may encourage smuggling, illicit trade and under-invoicing of imports, and also address the issues of transfer pricing.<sup>33</sup> Some of the policy discussions to explore are the following:

- *Income tax: While a progressive tax system that places more of the tax burden on upper-income households is in place in most countries in the region, greater efforts are needed to broaden tax bases. Moreover, a framework is needed in which a fair tax system promotes both growth and equitable distribution of income.*
- *Value added taxes (VAT).* Part of the framework will entail increasing the collection efficiency of sales taxes and VAT, and tackling non-compliance and evasion of VAT payments, which are important issues in several countries. Here too, the base for VAT receipts can be strengthened by extending its coverage to a wider range of sectors, including finance and services, which are currently often exempt. However, issues that

<sup>31</sup> Dev Kar (2011). Illicit financial flows from the least developed countries: 1990-2008. United Nations Development Program Discussion Paper. Available from [http://works.bepress.com/dev\\_kar/3](http://works.bepress.com/dev_kar/3).

<sup>32</sup> Christian Aid (2009). False profits: robbing the poor to keep the rich tax-free. Christian Aid Report (March). London. Available from [www.christianaid.org.uk/images/false-profits.pdf](http://www.christianaid.org.uk/images/false-profits.pdf).

<sup>33</sup> For example, in 2010, illicit financial flows from developing countries were estimated to be in the range of \$850 billion to \$1.1 trillion as reported in UNDESA, *World Economic Situation and Prospects* (New York, 2014).

need to be addressed are equity and jurisdictional issues between national and subnational levels of government.

- *Capital gains.* In many countries, more efforts are needed to tax capital gains effectively. Some mechanisms for taxing capital gains in securities or property have been developed by some countries and should be more widely implemented. Regional cooperation can play an important role in mobilizing domestic resources, particularly in terms of avoiding tax competition.
- *Tax evasion.* Tackling tax evasion will be critical in leveraging more domestic resources for sustainable finance. One way to address tax evasion may be by deducting more taxes at source through withholding or advance taxes. The introduction of minimum taxes on companies and associations of persons is a popular instrument for tackling tax evasion. Additional measures will require greater regional cooperation to deal with tax havens and to tackle transfer pricing by multinational corporations. Additional measures will require greater regional cooperation to deal with tax havens and to tackle transfer pricing by multinational corporations.
- *Make existing expenditure more effective and development oriented.* An important component of making more domestic public resources available for financing sustainable development will be to rationalization public expenditure to make it more effective. This will entail reprioritizing existing expenditure towards development, and by making it more effective, by reducing, for instance, subsidies.

## V. Broadening and deepening capital markets

47. This section highlights the needs of exploiting the potential of capital markets to facilitate channelling private savings towards sustainable development.

48. Asia has large pool of savings which has yet to be deployed for development purposes. As noted in box 5, the region's combined assets of high net worth individuals and mass affluent were \$33.2 trillion in 2012 and are expected to increase to \$65.9 trillion by 2020.

### Box 5: Assets of high net worth individuals and mass affluent in Asia and the Pacific

The Asia-Pacific region is characterized by high levels of savings. According to PricewaterhouseCoopers (PwC), the region's high net worth individuals had \$12.7 trillion in assets in 2012, while the region's mass affluent had \$20.5 trillion in assets.<sup>a</sup> PwC estimated that these values will increase, respectively, to \$43.3 trillion and \$22.6 trillion by 2020.<sup>b</sup> These large and growing savings can provide financing for the region's sustainable development. However, the development of capital markets in the region has not kept pace with its rapid economic growth, and, as a result, substantial amounts of the region's savings are held in other parts of the world.

<sup>a</sup> High net worth individuals own \$1 million or more in assets; mass affluent individuals own between \$100,000 and \$1 million in assets.

<sup>b</sup> PwC, Asset management 2020: a brave new world (PricewaterhouseCoopers International, 2014). Available from [www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf](http://www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf).

Source: ESCAP.

49. The importance of capital market development as part of a strategy to mobilize domestic resources for development was recognized in the 2002 Monterrey Consensus on Financing for Development and its follow-up 2008 Doha Declaration: *We recognize the need to strengthen and develop the domestic financial sector, by encouraging the orderly development of capital markets through sound banking systems and other institutional arrangements aimed at addressing development financing needs, including the insurance sector and debt and equity markets, that encourage and channel savings and foster productive investments.*<sup>34</sup>

### A. Equity markets

50. Although the share of equity markets as a proportion of total financial sector assets is small in Asia, the key stock markets have experienced impressive growth in recent years. As a result, the share of Asia and the Pacific in world market capitalization stands at 31%, of which the stock markets of Tokyo, Hong Kong and Shanghai account for over 50%. In addition, there are other dynamic markets in the region that have strong potential for cross border listing.

51. Few key trends are worth highlighting: stock market capitalization in Asia and the Pacific is close to \$15 trillion, well over the value of Eastern Europe, Middle East and Africa (EMEA) markets. In total, almost 20,000 companies were listed in the region's stock markets at the end of 2012 – well above comparative figures for other continents. Stock markets in

<sup>34</sup> United Nations, *Monterrey Consensus on Financing for Development* (New York, 2002). Available from [www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf](http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf).

Asia and the Pacific, however, vary significantly in terms of market capitalization, ranging from 144% of GDP in Malaysia to 0.3% of GDP in Armenia. In smaller economies, the breadth and depth of markets is often quite limited because of lack of liquidity, low level of corporate listings and weak regulatory frameworks and corporate governance.

52. For large and emerging economies, equity markets are important sources of corporate financing, not only domestically but also internationally, as large corporations are increasingly listing in international stock exchanges. As a result, equity markets of the region have witnessed growth in terms of size and cross-border investment activity. These markets are quite vibrant and offer high returns that encourage speculative trading and attract short term excessive and volatile capital inflows. These inflows destabilize equity markets if they are suddenly reversed. In addition, in some equity markets the pricing of stock issues may not truly reflect economic and corporate fundamentals, exacerbating the potential for market price volatility.

53. The region's stock markets have also become more integrated with international markets, and some of them are benefitting from foreign investments and cross listings. While in a number of economies the stock markets have become an important source of corporate funding, in some there is room for further development, and in others the full potential of equity markets remains to be exploited. For that purpose, countries in the region have scope for pursuing reforms to address a range of constraints holding back the growth of equity markets, including weaknesses in the legal, regulatory and governance frameworks.

## **B. Bonds markets**

54. The development of local currency (LCY) bond markets in the region received a boost after the Asian financial crisis of 1997/98.<sup>35</sup> The rationale for supporting its development was to reduce the extent of currency mismatches, which prior to the crisis were associated with banks borrowing overseas in United States dollars and lending domestically in domestic currency. After 1997, domestic bond markets developed spectacularly in some Asia-Pacific developing countries.<sup>36</sup> The value of domestic bonds outstanding in China; Hong Kong, China; Indonesia; Malaysia; Philippines, Republic of Korea; Singapore; and Thailand represented only 21% of the GDP in 1997 (BIS data). These figures were comparable to developing countries from Latin America (20%) and Eastern Europe (17%). However, by 2010, the value of domestic bonds outstanding increased to 64% of the GDP for Asia-Pacific developing countries, largely exceeding Latin America (34%) and Eastern Europe (33%) in the same year.<sup>37</sup>

55. Table 2 shows bonds issued in domestic currency in selected Asia-Pacific countries for which data are available. The domestic bonds issued increased at an average annual rate of 16.8% for developing countries between 2005 and 2013, compared with 4.9% for developed countries. On average, growth of these markets was faster over the period 2005-2009 compared with 2009-2013, especially for the developed countries in the region.

<sup>35</sup> See e.g. Lim, Mah-Hui and Joseph Lim (2012), "Asian initiatives at monetary and financial integration: A critical review," UNCTAD.

<sup>36</sup> See Seok Baek and Pil-Kyu Kim, "Determinants of bond market development in Asia", in *Asian Capital Market Development and Integration: Challenges and Opportunities*, Asian Development Bank and Korea Capital Market Institute, eds. (Oxford, Oxford University Press, 2014).

<sup>37</sup> *Ibid.*

56. As of September 2013, Japan remained the largest issuer of domestic currency bonds in the region, but its share decreased to 44.3% from 66% in September 2005. India's issues of domestic currency bonds increased the fastest, from only \$0.2 billion in September 2005 to \$2 billion in September 2013. The growth of LCY bond markets in India was particularly fast over 2009-2013: 90% per year. Other countries where domestic currency issues grew fast are the Russian Federation (23.5%), China (22%), Thailand (18%), Australia and Pakistan (13.9%). On average, there was an increase in amounts outstanding of LCY bonds as percentages of the GDP between 2005 and 2009 for both developing and developed countries in the region. The largest ratios of LCY bonds outstanding to GDP in the region in September 2013 were for Japan (263%), Republic of Korea and Malaysia (104%), Australia (86%) and Thailand (74%).

**Table 2.** Domestic debt securities issued by selected Asia-Pacific economies, 2005-2013

	Amounts outstanding (Billions of US dollars)			Percentages of the GDP			Annual average growth rates	
	Sep.05	Sep.09	Sep.13	Sep.05	Sep.09	Sep.13	Sep. 05 - Sep. 09	Sep. 09 - Sep. 13
Developing countries	2,142.2	4,436.6	7,415.7	35	42	42	20.0	13.7
China	808.8	2,413.6	3,974.5	36	48	43	31.4	13.3
India	31.8	45.2	594.6	4	4	32	9.1	90.5
Indonesia	43.4	115.9	101.2	15	21	12	27.8	-3.3
Republic of Korea	699.2	925.4	1,361.7	78	102	104	7.3	10.1
Malaysia	131.0	204.4	326.7	91	101	104	11.8	12.4
Pakistan	33.7	44.0	95.8	31	26	41	6.9	21.5
Philippines	38.5	52.4	89.4	37	31	33	8.0	14.3
Russian Federation	49.3	135.4	267.1	6	11	13	28.7	18.5
Singapore	48.3	86.7	101.7	38	45	34	15.8	4.1
Thailand	76.2	196.7	286.5	43	74	74	26.7	9.9
Turkey	181.9	216.9	216.5	38	35	26	4.5	0.0
Developed countries	9,721.2	13,270.1	14,245.4	179	216	216	8.1	1.8
Australia	454.5	962.9	1,291.0	62	97	86	20.6	7.6
Japan	9,244.8	12,279.8	12,894.9	202	244	263	7.4	1.2
New Zealand	21.8	27.4	59.5	19	23	33	5.9	21.4
Total	14,005.6	22,143.3	29,076.8	120.9	132.5	119.5	12.1	7.0

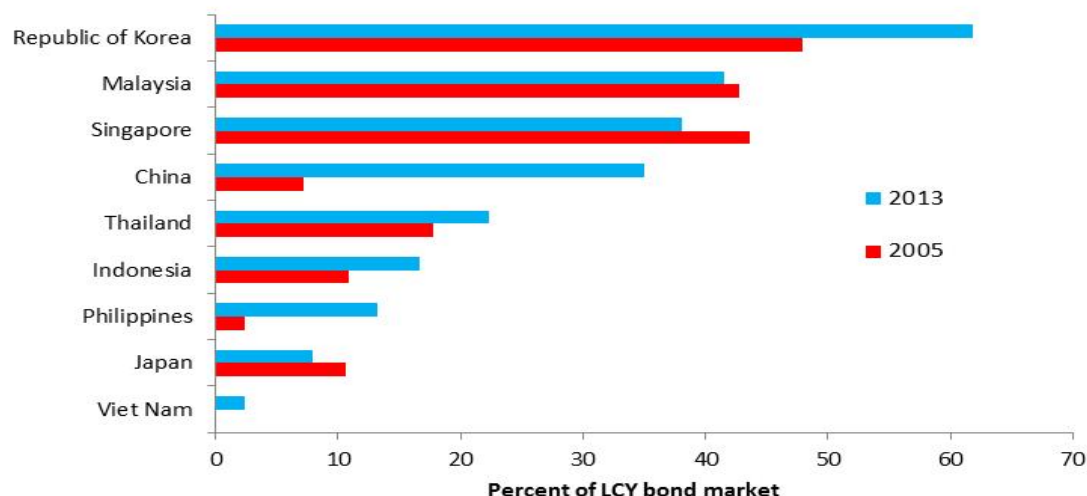
Source: ESCAP, based on data from *BIS Quarterly Review*, March 2014, table 16A; World Bank, World Development Indicators database; and CEIC Data Company.

57. On average, LCY bonds issued by Governments represent a large share of the total LCY bonds issued by Asia-Pacific countries, 78.1% as of December 2013. However, the share of corporate LCY bonds increased significantly, from 14.7% in December 2005 to 21.9% in December 2013. As of the latter date, the share of corporate bonds was highest in the Republic of Korea (61.8%); Hong Kong, China (44.3%); Malaysia (41.5%); Singapore (38.1 %); and China (35%). Over the past eight years, the share of corporate bonds increased the most in China, the Republic of Korea and the Philippines (see figure 5).

58. The rapid growth of markets for LCY bonds in Asia-Pacific countries since the Asian financial crisis shows that the region is able to increasingly support its financial needs while reducing dependence on foreign borrowing. The demand for LCY bonds has been supported by a broadened investor base including both domestic and foreign institutional investors, such as mutual funds, pension funds and insurance companies. As of December 2013, the foreign holdings of LCY government bonds as a share of the amounts outstanding were 32.5% for

Indonesia, 29.4% for Malaysia, 17.4% for Thailand, 9.2% for the Republic of Korea and 8.3% for Japan.<sup>38</sup>

**Figure 5.** Share of corporate bonds in the total LCY bonds issued, 2005 and 2013



Source: ESCAP, based on data from ADB, *Asian Bonds Online*, “Size on LCY bond market”.

### C. The emergence of institutional investors

59. Institutional investors include pension funds, mutual funds, insurance companies, sovereign wealth funds and investment managers. Globally, most of the assets managed by institutional investors are located in the OECD countries. As of the end of 2011, these countries held \$70 trillion of the \$85 trillion in assets held globally. The institutional investors can play an increasingly critical role in the global provision of long-term finance, part of which could be tapped for the funding of sustainable development. Their growing importance is, according to a recent OECD report, “a welcome developments as long as their associated risks are properly understood and managed”.<sup>39</sup>

60. What follows describes briefly the current status of institutional investors in Asia and the Pacific. Table 3 shows details of the top institutional investors in the region in three categories: asset management firms such as insurance companies and mutual funds, pension funds and sovereign wealth funds. The table shows the largest institutional investors in each of these categories, their country, the amount of assets under management and their global ranking.

61. Table 3 reveals important differences across the three categories of institutional investors. Of the \$68.30 trillion in assets under management by the world’s top 500 asset management firms, the share of Asia and the Pacific was only 9.7% or \$6.65 trillion at the end of 2012. The vast majority of this amount was managed by firms from the region’s developed countries: \$4.82 trillion (72.4%) by Japan and \$850 billion (12.8%) by Australia.

<sup>38</sup> Asian Development Bank, *AsianBondsOnline*. Available from <http://asianbondsonline.adb.org/>.

<sup>39</sup> OECD Task Force on Institutional Investors and Long-Term Financing, “G20/OECD High-level principles of long-term investment financing by institutional investors”, September (Paris, 2013). Available from [www.oecd.org/finance/private-pensions/G20-OECD-Principles-LTI-Financing.pdf](http://www.oecd.org/finance/private-pensions/G20-OECD-Principles-LTI-Financing.pdf).



Among the region's developing countries, the Republic of Korea had the largest share (7.3% or \$488 billion), followed by China (5.8% or \$390 billion) and India (1.4% or \$90 billion). It should be pointed out that none of the Asia-Pacific companies in the world's top 500 was among the world's 20 largest. The largest one in 2012 was Nippon Life Insurance which, with \$663 billion in assets, was ranked 23 in the world that year.

**Table 3.** Top institutional investors in Asia-Pacific economies

Top Asia-Pacific Asset Management firms (As of the end of December 2012)			Top Asia-Pacific Pension Funds (As of the end of December 2012)			Top Asia-Pacific Sovereign Wealth Funds (As of the end of March 2014)		
Country and Asset Manager Name	Assets (\$ billion)	World rank	Country and Fund Name	Assets (\$ billion)	World rank	Country and Fund Name	Assets (\$ billion)	World rank
<b>Japan</b>			<b>Japan</b>			<b>China</b>		
Nippon Life Insurance	662.9	23	Government Pension	1,292.0	1	China Investment Corporation	575.2	4
Zenkyoren	531.9	33	Local Government Officials	201.4	7	SAFE Investment Company	567.9	5
Mitsubishi UFJ Financial	529.2	34	Pension Fund Association	119.2	20	National Social Security Fund	160.6	11
Sumitomo Mitsui Trust and	456.1	38	National Public Service	93.1	24	China-Africa Development Fund	5.0	52
Dai-ichi Life Insurance	362.1	47	Public School Employees	68.0	40	<b>Singapore</b>		
Shinkin Central Bank	345.1	50	Organization for Workers	54.8	56	Government of Singapore	320.0	8
Meiji Yasuda Life Insurance	337.1	52	Private School Employees	40.6	85	Temasek Holdings	173.3	9
Nomura Holdings	277.3	61	Mitsubishi UFJ Financial	25.3	140	<b>Hong Kong, China</b>		
Sumitomo Life Insurance	243.3	66	Nippon Telegraph & Telephone	24.3	149	Hong Kong Monetary Authority	326.7	7
Mizuho Financial Group	239.6	68	<b>Australia</b>			<b>Russian Federation</b>		
Resona Trust and Bank	172.3	87	Future Fund	89.5	29	National Welfare Fund	88.0	13
MS&AD Insurance Group	169.6	88	AustralianSuper	55.4	54	Reserve Fund	86.4	14
Nikko Asset Mgmt.	162.0	93	Qsuper	42.0	80	Russian Direct Investment Fund	13.0	39
Sumitomo Mitsui Asset Mgmt.	68.9	161	First State Super	37.5	94	<b>Kazakhstan</b>		
Fukoku Mutual Life Insurance	67.3	164	State Super	37.2	96	Samruk-Kazyna JSC	77.5	15
Tokyo Marine Holdings	65.7	167	UniSuper	34.8	104	Kazakhstan National Fund	68.9	19
Daiwa Securities	53.4	185	CSC	27.5	126	National Investment Corporation	20.0	31
NKSJ Holdings	46.0	200	REST	25.2	142	<b>Australia</b>		
<b>Australia</b>			Hesta	22.5	160	Australian Future Fund	90.2	12
Macquarie Group	290.1	83	Sunsuper	22.4	161	Western Australian Future Fund	0.3	68
AMP	133.4	104	Cbus	21.5	167	<b>Republic of Korea</b>		
NAB/MLC	100.6	126	<b>Republic of Korea</b>			Korea Investment Corporation	72.0	17
QIC	72.9	153	National Pension	368.5	4	<b>Iran (Islamic Republic of)</b>		
Westpac/BT	58.6	175	<b>Singapore</b>			National Development Fund of	58.6	22
Industry Funds Mgmt.	40.3	222	Central Provident Fund	188.4	8	<b>Malaysia</b>		
Challenger Financial	39.7	224	<b>China</b>			Khazanah Nasional	40.5	25
<b>Republic of Korea</b>			National Social Security Fund	177.5	10	<b>Brunei Darussalam</b>		
Samsung Group	338.5	76	<b>Malaysia</b>			Brunei Investment Agency	40.0	26
Hanwha Group	71.1	156	Employees Provident Fund	175.7	12	<b>Azerbaijan</b>		
Mirae Asset Financial Group	37.8	228	Retirement Fund-KWAP	29.1	117	State Oil Fund	34.1	27
<b>China</b>			<b>Russian Federation</b>			<b>New Zealand</b>		
China Asset Mgmt.	50.5	189	National Wealth Fund	88.1	27	New Zealand Superannuation	20.3	30
Harvest Fund Mgmt.	48.8	194	<b>India</b>			<b>Timor Leste</b>		
China Southern Fund Mgmt.	36.4	233	Employees Provident	68.1	39	Timor-Leste Petroleum Fund	14.6	38
<b>World (Top-500)</b>	68,294.0		<b>World (Top-300)</b>	13,995.2		<b>World (Total)</b>	6,365.8	
<b>Asia-Pacific (In top-500)</b>	6,653.1 (9.7%)		<b>Asia-Pacific (In top-300)</b>	3,675.5 (26.3%)		<b>Asia-Pacific (In total)</b>	2,854.8 (44.8%)	

Source: ESCAP, based on data from Towers Watson, "The world's 500 largest asset managers" (2013); Towers Watson, "The world's 300 largest pension funds (2013); and OECD and SWF Institute, "Sovereign wealth fund ranking". Available from [www.swfinstitute.org](http://www.swfinstitute.org) (accessed 5 May 2014).

62. In contrast, in the category of sovereign wealth funds (SWFs), the Asia-Pacific region had a larger global presence – \$2.85 trillion or 45% of the world's total assets under management. In addition, sovereign wealth funds from developing countries represented 96% of the region's total assets under management, of which China represented \$1.31 trillion or 45.8%; Singapore, \$493 billion or 17.3%; Hong Kong, China, \$327 billion or 11.4%; and the Russian Federation, \$187 billion or 6.6%. In addition, smaller countries, such as Timor-Leste, Azerbaijan and Brunei Darussalam, had SWFs with assets exceeding \$10 billion.

63. The share of Asia and the Pacific in the assets under management of the world's top 300 pension funds was 26.3% or \$3.68 trillion at the end of 2012. Although the developed countries from the region represented the lion's share of this amount (Japan, \$2.03 trillion or 55%; Australia, \$478 billion or 13%), developing countries, including the Republic of Korea, China, Singapore, Malaysia, the Russian Federation and India, represented 31.5% of the total. In 2012, the region was home to 7 of the world's 20 largest pension funds, including the world's largest (Japan's Government Pension Investment, with \$1.29 trillion in assets) and the number 4 (Republic of Korea National Pension, with \$369 billion in assets).

64. Asset managers, pension funds and SWFs in Asia and the Pacific can contribute to financing infrastructure, as suggested in the description of global investment trends by institutional investors below.

65. Globally, the portfolio allocation of institutional investors has tended to shift from equities to investments in bonds and the so-called *alternative asset* classes. The shift from equities to bonds started in the early 2000s but accelerated after the global financial crisis, as investors sought to reduce risks. However, the low-yield environment prevailing in recent years pushed some institutional investors to take additional risks in the search for higher returns by investing in alternative assets, such as hedge funds, real estate, private equity and most recently infrastructure.<sup>40</sup>

66. Pension funds have traditionally invested in infrastructure through listed companies and fixed income instruments. However, over the last two decades they have started to recognize infrastructure as a distinct asset class which, although illiquid, could be beneficial to enhance portfolio diversification. Because of their long investment horizons, pension funds and other institutional investors can afford the risk of investing in less liquid and longer-term assets such as infrastructure.<sup>41</sup>

67. A recent survey of large pension funds and public pension reserve funds by OECD found that their investment in unlisted infrastructure equity was relatively small in 2012, equivalent to \$64 billion, or only 3% of the total assets.<sup>42</sup> An obstacle for this type of investment is that their nature and risks, which include high up-front costs and the large scale of projects, require expertise that can take a long time to build and that may be beyond the means of smaller pension funds. However, the experience of Chile and Mexico has demonstrated that Governments can assist pension funds' investment in infrastructure by developing infrastructure corporate bond markets.<sup>43</sup>

68. An important consideration with regard to the role of institutional investors as an increasingly important source of funding for long-term investment, including in infrastructure, is the investor base. Although the participation of foreign investors in Asia-Pacific LCY bond markets is likely to have enhanced liquidity and market efficiency, the potential disruptions foreign investors could cause are a matter of concern, as highlighted in a special chapter of the IMF *Global Financial Stability Report* (GFSR) of April 2014.<sup>44</sup>

69. This report shows that the increasing participation of global institutional investors in emerging markets, particularly LCY bond markets, has heightened their exposure to global financial conditions, contagion and herding. It observes that sudden large capital outflows can still induce financial distress through their effects on exchange rates and the balance sheets of banks, firms and household *despite* large volumes of international reserves and flexible

<sup>40</sup> OECD, "The role of banks, equity markets and institutional investors in long-term financing for growth and development: report for G20 leaders", February (Paris, 2013). Available from [www.oecd.org/finance/private-pensions/G20reportLTFinancingForGrowthRussianPresidency2013.pdf](http://www.oecd.org/finance/private-pensions/G20reportLTFinancingForGrowthRussianPresidency2013.pdf).

<sup>41</sup> OECD, "Report on pension funds' long term investments: survey of large pension funds and public pension reserve funds", October (Paris, 2013). Available from [www.g20.org/sites/default/files/g20\\_resources/library/LargestPensionFunds2012SurveyFINAL.pdf](http://www.g20.org/sites/default/files/g20_resources/library/LargestPensionFunds2012SurveyFINAL.pdf).

<sup>42</sup> *Ibid.*

<sup>43</sup> *Ibid.*

<sup>44</sup> The chapter is entitled "How do changes in the investor base and financial deepening affect emerging market economies?"

exchange rates arrangements which can buffer the impacts of those shocks in emerging markets. In addition, the report warns that large capital inflows driven by global financial conditions can generate credit booms that sow the seeds of a future crisis.<sup>45</sup>

70. Considering the risks of relying too much on global institutional investors for the development of domestic capital markets, the GFSR emphasizes the importance of developing a larger local investor base and better institutions. For that purpose, a recent report by G20 and OECD provides valuable guidelines to policymakers about how to design policies and a regulatory framework to encourage institutional investors to provide a stable source of capital for long-term investment purposes.

71. These principles, which include policies to promote the development of long-term savings and institutional investors, governance and regulatory arrangements, are rather general and need to be refined according to specific country and institutional contexts. Nevertheless, they provide a basis for discussions and regional cooperation to promote the development of institutional investors in Asia and the Pacific.

### ***Key issues and challenges***

72. Financial markets in Asia and the Pacific should provide an implementable framework to efficiently channel savings and reserves to productive investments to support the real economy that can create jobs and foster economic growth.

73. As far as equity markets are concerned, an important challenge is how to achieve greater regional financial integration among them. Specific obstacles for such integration include:<sup>46</sup>

- Lack of linkages between jurisdictions across the whole spectrum of financial infrastructure, including trading, payment, clearing, settlement and custodian systems which would facilitate movements of capital and savings across jurisdictions;
- Lack of harmonisation of standards in the capital markets, including, for example the adoption of minimum acceptable international standards, is limiting investor confidence and reducing the flow of capital within the region;
- Weak cooperative efforts in financial system development limit the diversity of financial intermediation channels in individual jurisdictions while non-supervisory restrictions is limiting access of foreign financial intermediaries to the domestic financial markets.

74. A critical issue to be addressed for the development of the region's capital markets is to enhance countries' capacities to set up and improve the functioning of capital markets institutions and regulatory frameworks. This is particularly important for CSN.

75. In addition, CSN can benefit from the development of regional bond markets. This would require harmonizing tax rules, setting common standards for bond issuance,

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<sup>45</sup> IMF, *Global Financial Stability Report* (Washington, D.C. 2014, p. 69). Available from [www.imf.org/external/pubs/ft/gfsr/2014/01/index.htm](http://www.imf.org/external/pubs/ft/gfsr/2014/01/index.htm).

<sup>46</sup> Ip-Wing Yu, Kang-Por Fung and Chi-Sang Tam, "Assessing financial market integration in Asia - equity markets", *Journal of Banking & Finance*, vol. 34 (2010), pp.2874-2885.

developing cross-border clearing, settlement and payment, and depositary systems, as well as regional credit rating agencies.

76. In the context of ASEAN+3, the Asian Bond Market Forum (ABMF) was established in September 2010 to provide a platform for bond market experts from the region to foster the standardization of market practices and harmonization of regulations relating to cross-border bond transaction in the region. One of the ABMF sub-forums, SF1, has agreed to develop an intra-regionally standardized bond issuance framework, which would ultimately allow bond issuers in ASEAN+3 to issue bonds in all participating economies with one set of standardized documentation and information disclosure requirements, subject to compliance with the legal and regulatory requirements of each economy. The deliberations of this sub-forum resulted in a recently published proposal to establish the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF).<sup>47</sup>

77. Another issue that needs careful consideration is how to deal with potentially disruptive capital flows into and out of the region's LCY bond markets, such as the sudden withdrawals of funds that took place after the collapse of Lehman Brothers in September 2008. The risk of such disruptions reoccurring in the future reinforces the need for the development of LCY bond markets to be accompanied by proper regulation and an effective institutional framework to reduce volatility arising from the participation of foreign investors.<sup>48</sup> Macro prudential measures, including capital account management measures, should also be considered in the context of the development of the region's capital markets.<sup>49</sup>

78. Some countries in the region could consider the development of innovative finance institutions, such as Islamic banking (see box 6).

79. As far as institutional investors are concerned, these manage very large volumes of assets and, in the light of the structure of their liabilities, could play a larger role in the financing of long-term projects, including infrastructure. Although many developing countries in the region have large sovereign wealth funds capable of providing long-term financing for such projects, the degree of development of their asset management industry is rather low. However, because of the growing number of high-net-worth and mass affluent individuals in the region noted in the previous section, there is a large potential for the asset management industry to develop in years to come.

80. This development would be highly desirable to increase the level of financial intermediation and the availability of funding for investment projects in the region. In addition, as also noted in the previous section, a stronger presence of domestic institutional investors in the region's capital markets will reduce the potential for disruptive capital flows by international investors. A major challenge for the development of domestic institutional investors will be to set up proper institutional and regulatory frameworks, an issue that deserves further research and discussion in future.

<sup>47</sup> See ADB, *Proposal on ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF)* (Manila, 2014).

<sup>48</sup> See Sabyasachi Mitra and Thiam Hee Ng, "Managing foreign fund flows into Asia's domestic bond markets", in *Asian Capital Market Development and Integration: Challenges and Opportunities*, Asian Development Bank and Korea Capital Market Institute, eds. (Oxford, Oxford University Press, 2014).

<sup>49</sup> See e.g. Olivier Jeanne, "Capital flow management and macroprudential policies in Asia," in *Asian Capital Market Development and Integration: Challenges and Opportunities*, Asian Development Bank and Korea Capital Market Institute, eds. (Oxford, Oxford University Press, 2014).

## Box 6: Islamic banking finance: a new source of development finance

Islamic finance (*Shari'ah*-compliant finance and also known as ethical banking) can become one of the innovative sources of bond financing, especially in the case of infrastructure projects, as well as in deepening financial inclusion due to interest-free loans in the Asia-Pacific region. The defining principle of Islamic banking is prohibiting the charging and paying of interest but promoting profit-sharing mechanisms. Therefore, by developing innovative profit-sharing frameworks, this financing mechanism can provide investors with new instruments that address the minimization of risks from long-term investment.

The World Islamic Competitiveness Report 2013-14 reported that the combined Islamic banking assets with commercial banks reached \$567 billion in 2012, based on 20 Islamic banking markets. It further estimated that Islamic banking assets would exceed \$1.7 trillion in 2013 with an annual growth rate of 17.6% over the last four years. The assets are further estimated to exceed \$3.4 trillion in 2018. The Banker (2013) noted that the *Shari'ah*-compliant assets of major Islamic financial institutions increased from \$1.16 trillion in 2012 to \$1.3 trillion in 2013, with 1.47% aggregate return on assets.

In 2013, Islamic banks were serving consumers globally, with some of the high-growth countries (Islamic Republic of Iran, Indonesia, Malaysia and Turkey) are in the Asia-Pacific region (figure B6.1), and constituted about 13.5% of global Islamic banking assets shares. The key countries in the region are the Islamic Republic of Iran (\$416 billion), Indonesia (\$20 billion asset), Malaysia (\$125 billion) and Turkey (\$39 billion). According to the Islamic Finance Country Index (IFCI), the Islamic Republic of Iran tops the list, followed by Malaysia, Saudi Arabia and others (figure B6.2). Also, there is potential for increasing the sector in Pakistan, Kazakhstan, Tajikistan and Azerbaijan. In 2013, the Reserve Bank of India granted a licence to a non-banking financial company to run Sharia-compliant finance in the country.<sup>a</sup>

Figure B6.1: Islamic banking global shares, 2012

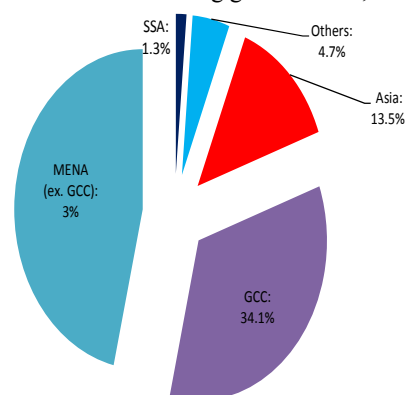
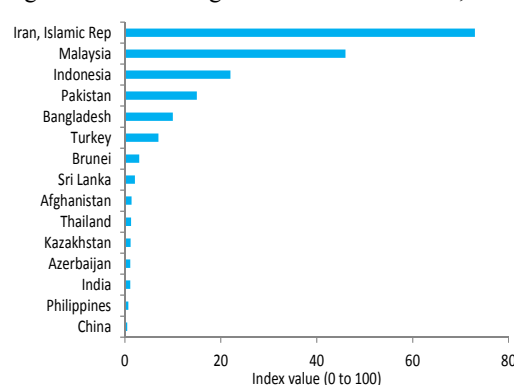


Figure B6.2: Ranking of IFCI in Asia-Pacific, 2013



Source: Islamic Financial Services Industry Stability Report 2013, Global Islamic Finance Report, 2013.

With the implementation of Basel III, increased capital requirement ratios will put pressure on Islamic banks to restructure and seek innovative ways to provide financing for businesses as well as to have instruments of diversifying risk-based performance assessments. Owing to differences in Islamic banking vis-à-vis traditional commercial banking, national and regional regulatory frameworks may need to identify ways to improve surveillance and to customize institutional mechanisms that suit international banking standards, including that of capital adequacy ratio, accounting standards and risk management practices.

<sup>a</sup> For more information and discussions, see World Islamic Banking Competitiveness Report 2013-14: The Transition Begins (Ernst & Young, 2013) and Global Islamic Finance Report (London, BMB Islamic UK, 2013).

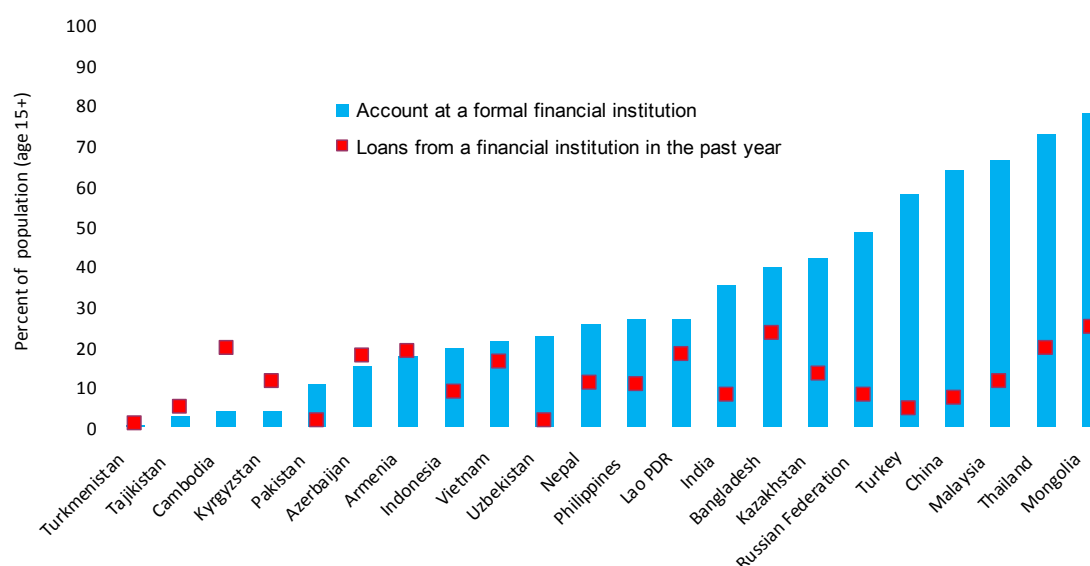
Source: ESCAP.

## VI. Financial inclusion

81. In many developing countries, large proportions of the population are excluded from the financial system. Therefore, fostering financial inclusion will form a critical factor in strengthening domestic demand in the region to rebalance the global economy and to address rising inequality and social progress.

82. The large majority of the adult population, especially the poor and vulnerable sections of the society, is typically excluded from core financial services – savings, credit, insurance and remittances in the Asia-Pacific region. Despite progress, billions of adults in Asia-Pacific region still lack access to reliable financial services and suffer from low financial literacy and capability. Recent data show that 50% of adults worldwide have an account at a formal financial institution such as a bank, a credit union, a cooperative, a post office, or a microfinance institution, but most developing Asia-Pacific countries fall below this average (see figure 6).

**Figure 6.** Adults (age 15+) with account at a formal institution, and had loans in the past year (%)



Source: ESCAP, based on World Bank, G20 Financial Inclusion Indicators dataset (accessed 10 March 2014).

Note: (1) Most of the data was collected in 2010-2011 period. (2) Contrary to what would be implied by definition, loans are reported higher than accounts in countries such as Cambodia.

83. The cross-country variation in access to financial services can be partly explained by factors such as per capita incomes, urbanization and financial depth, but this is not the whole story. Countries such as Thailand and India, for instance, have higher-than-predicted penetration rates. Financial inclusion differs by individual characteristics such as gender, education level, age, and rural or urban residence. In India, for instance, women are 41% less likely than men to have a formal account, compared with 22% in the rest of the developing world.<sup>50</sup>

<sup>50</sup> See Asli Demirguc-Kunt and Leora Klappe, "Measuring financial inclusion: the global finindex database", Policy Research Working Paper, No.6025 (Washington, D.C., World Bank, 2012).

84. The cost of credit is an important factor determining financial inclusion in the region. The targeting of credit to, for example, state-owned enterprises, is limiting credit availability to the private sector, while high interest rates are crowding out people. Other factors also drive exclusion from financial services: some people are simply unaware of what is available, while others may find the services on offer inappropriate to their needs. Banks may be concerned about the potential profitability of poorer customers, the risks they are thought to present, and the costs of dealing with a larger number of small transactions. Also, while basic consumer protection requirement is on the books in most economies, enforcement mechanisms are weaker than legislative requirements and institutional structures are weak.

85. One of the key messages from the microcredit revolution is that the poor need not only credit but also savings, insurance, remittances and other services to make the most of their resources. An innovative way to enhance access to these services is through branchless banking. A survey conducted by Technology and Business Model Innovation Program of the Consultative Group to Assist the Poor found that at the end of 2011, there were 148 active branchless banking businesses worldwide and 26 of these had more than 1 million customers. In developing Asia, countries such as the Philippines have been particularly successful with mobile-phone based models.<sup>51</sup>

86. Recently, financial inclusion initiatives have led to new and innovative ways of providing banking solutions to people who did not previously have access to banking services in the Pacific. One growth channel has been through use of mobile phone banking. ICT use has supported the rollout, given the estimated 60% of Pacific Islanders who now have access to mobile phones (in 2006 the region's mobile phone penetration was under 10%). The rollout of "rural banking" and "mobile banking" solutions have required banking regulators to adapt requirements, including for example anti-money laundering and counter-terrorism financing compliance, and banking via "agents", in new ways.<sup>52</sup>

87. Financial inclusion is an important tool to achieve the objectives of sustainable development. Therefore, different types of domestic financial institutions e.g. commercial banks, microfinance institutions, development financial institutions, post offices and other public networks have a role to play to serve the poor and to address the growing income and social inequality. The financial markets need to improve efficiency and financial allocation of resources. To move forward it would be useful to identify lessons learned in countries of the region on innovative approaches to providing financial services for the poor and on successful regulatory and policy approaches (see box 7).

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Available from <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6025>.

<sup>51</sup> UNDP's Pacific Financial Inclusion Programme website ([www.pfip.org](http://www.pfip.org)) has more examples and information, as necessary.

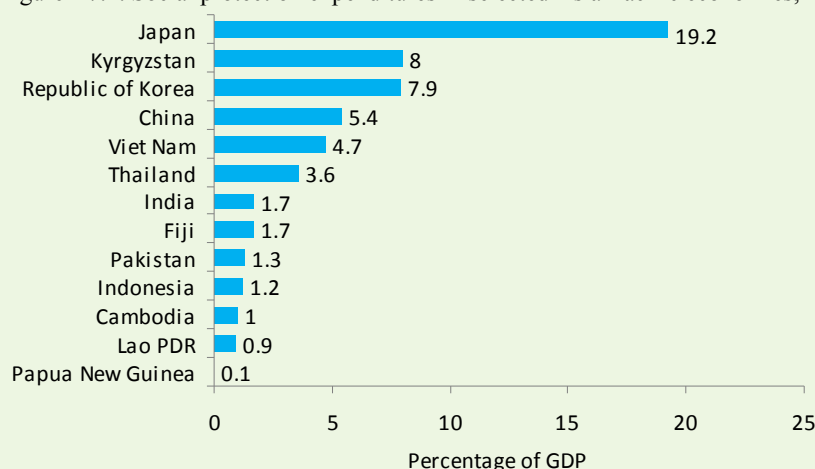
<sup>52</sup> A. Kelly, "Banking the unbanked in the Pacific", 11 June 2013. More information is available from [www.rockwellolivier.com.au/Whats%28news%29/Publications/TabId/109/ArtMID/573/ArticleID/118/Banking-the-unbanked-in-the-Pacific.aspx](http://www.rockwellolivier.com.au/Whats%28news%29/Publications/TabId/109/ArtMID/573/ArticleID/118/Banking-the-unbanked-in-the-Pacific.aspx).

## Box 7: Innovative measures for financing the social protection floor in Asia and the Pacific

Recognizing that it is a fundamental pillar of inclusive and sustainable development, developing Asia-Pacific countries have made substantial progress in implementing the social protection floor (SPF). By providing essential social transfers, countries ensure that all in need have access to social services in the area of health, as well as income security for children, working-age individuals and older persons – the four components of the SPF.

Despite the progress that has been made in enhancing social protection, coverage gaps remain. Lack of fiscal space results in poor availability and quality of public social services and low levels of social protection benefits. Indeed, countries are underperforming when it comes to the financing of social protection, as corroborated by the Asian Development Bank's Social Protection Index (SPI). A total of 19 countries in the region have SPIs lower than 0.10, and 10 middle-income countries have an SPI in the range of 0.10–0.20 (see figure B7.1).<sup>a</sup> This is alarming given that an SPI of 0.20 is considered to be the benchmark, which is to say that social protection spending should be at least equal to 20% of poverty-line expenditures or 5% of GDP (as poverty-line expenditures are set at one-quarter of GDP per capita) if it is to be effective.

Figure B7.1. Social protection expenditures in selected Asia-Pacific economies, 2009



Social protection has been typically financed through the combination of government tax revenues and official development assistance. The demographic and social changes that are transpiring in the region, coupled with the increasing frequency and intensity of natural and economic crises, are putting strains on these traditional financial sources. In this context, innovative financing schemes are seen as critical to achieve the sustainable financing of social protection, especially given the recognition of a need to increase social investments in the context of the development agenda beyond 2015.

- Health equity fund (HEF): establishes “third-party payer” systems to health facilities for services provided to the poorest patients;
- Sovereign wealth funds (SWF): a pool of money derived from a country's reserves which are set aside for investment purposes that will benefit the country's economy and citizens;
- Impact investing: an investment that uses the incentives of commercial capital development to generate beneficial social and environmental impact;
- Microfinance: a financial service – including microinsurance and microcredit – available to poor entrepreneurs and small business owners who have no collateral and would not otherwise qualify for a standard bank loan or insurance.

Countries in Asia and the Pacific have increasingly begun to use these innovative schemes to finance social protection. Complementing traditional sources, such schemes can be combined to finance the SPF (see table B7.2)



Box 7: (continued)

Table B7.2: Innovative Financing Initiatives by SPF Component

	Health	Children	Working-age	Older persons
Initiative	Health Equity Funds	The Citizen Foundation	Revolving Fund	Human Development Fund
Type	HEF	Impact investing	Microfinance	SWF
Country	Cambodia	Pakistan	India	Mongolia

*Cambodia-Health Equity Funds:* HEFs appeared in Cambodia in the early 2000s, initially supported by NGOs. Today, Cambodian HEFs cover more than three-quarters of all citizens living below the poverty line. In 2008, the country had 30 hospital HEFs that reported to the Ministry of Health. Moreover, the proportion of persons identified as eligible to benefit from HEFs ranged between 12% and 24% of the total populations of the villages involved. The HEFs have helped to increase the proportion of poor among hospital users. In four HEF-affiliated hospitals, in 2003-2004, the poorest made up 7% to 52% of hospitalised patients.<sup>b</sup>

*Pakistan- The Citizen Foundation:* Following an impact investing approach, the Citizens Foundation (TCF) builds and operates schools across all four provinces, which are government certified and follow national curriculum. At TCF schools, parents contribute on a sliding scale (capped at 5% of household income) that is based on an assessment of household income and the number of children in a family. The average monthly contribution of \$1 per pupil is a small share of the monthly cost of \$11 per pupil to run the school. Corporate and philanthropic donations pick up the rest, with over 50% of funds raised within Pakistan and the remainder from across the globe. In 2011, 72% of TCF students pursued post-secondary education, compared with the government school average of 40%.<sup>c</sup>

*Mongolia-Human Development Fund:* The Government of Mongolia has been supporting old age pensions through the Human Development Fund (HDF). The HDF was established in 2009 with the aim of accumulating excess revenues from the mining sector, and redirecting them towards the economic and human development of the country. In addition to pensions, the HDF is currently being used for providing health, housing and educational benefits to Mongolian citizens. Due to lack of fiscal space, Mongolia is considering the establishment of a pension reserve fund, to which a percentage of excess mining royalties will be invested.<sup>d</sup>

*India- Revolving Fund:* The 2001 earthquake in Gujarat left over 12,000 people dead and damages of approximately \$2.5 million. In response to limited Government financial support, the All India Disaster Mitigation Institute (AIDMI) created the Revolving Fund, a microcredit loan without interest rates, targeted at economic recovery and business development. To be eligible for a loan, the applicant must be a member of the Chamber of Commerce and Industry for Small Businesses (CCISB), come from a poor, disaster-affected household, and have an economically active profile. The Revolving Fund should be repaid within 12 months. Once repaid, the CCISB member is eligible to apply for additional loans.

<sup>a</sup> Asian Development Bank, *The Social Protection Index: Assessing Results for Asia and the Pacific* (Manila, 2013, pp. 13-15).

<sup>b</sup> Mathieu Noirhomme, Valéry Ridde and Florence Morestin, "Improving access to health care services for the poorest: the case of health equity funds", Policy Brief, (Montréal, Université de Montréal, July 2009). Available from [www.usi.umontreal.ca/pdf/publications/fonds\\_en.pdf](http://www.usi.umontreal.ca/pdf/publications/fonds_en.pdf).

<sup>c</sup> D. Capital Partners, "Impact investing in education: an overview of the current landscape", Education Support Program (ESP) Working Paper Series, No. 59 (Budapest, Hungary, Open Society Foundations, 2013). Available from [www.opensocietyfoundations.org/sites/default/files/impact-investing-education-overview-current-landscape-20140106\\_0.pdf](http://www.opensocietyfoundations.org/sites/default/files/impact-investing-education-overview-current-landscape-20140106_0.pdf).

<sup>d</sup> Alicia Campi, "Mongolia's quest to balance human development in its booming mineral-based economy", *Brookings East Asia Commentary*, No. 56 of 78 (January 2012).

Source: ESCAP.

**Key Issues and Challenges**

- *Inclusive financial system:* Policies need to be in place to ensure that an inclusive financial system is also efficient, fair, predictable and secure. Policies should be adopted to maximize access and increase effectiveness in microcredit and other types of institutions.
- *Institutional framework for responsible business practices:* Appropriate institutional frameworks and regulations that reinforce responsible business practices are important. An efficient institutional frameworks and modalities are critical to create such an enabling environment in the region.
- *Financial literacy:* Efforts to improve financial literacy and measures for consumer protection have increased in recent years. However, wider programmes to provide access, and then enforcement and monitoring mechanisms remain weak. Many countries in the region lack policies to increase financial literacy and rules for consumer protection. Countries need to increase financial literacy and to enforce consumer protection for improving access to financial services.

## VII. Leveraging public-private partnerships

88. Public-private partnerships (PPPs) have become more attractive in the Asia-Pacific region over the last few decades because of their potential to close gaps in national and regional development financing. In addition to mobilizing private sector resources, PPPs are seen as a way to take advantage of private sector efficiency and innovation capacity while shifting some risks to the private partner.

89. Looking at the spectacular increase in private investment in infrastructure since 1990, the potential for PPPs to continue playing an important role in the region is clear. Private investment committed to infrastructure in developing countries of the region grew more than twenty-fold in less than a decade from \$2 billion in 1990 to \$48.9 billion in 1997, before being affected by the Asian financial crisis in 1997/98. Subsequently, the average annual growth rate of private sector investment reached 25.4% between 2002 and 2008. Stimulus policies adopted by many countries in the region since the crisis further boosted private investment, especially those tackling infrastructure bottlenecks, to an unprecedented level of \$120.1 billion in 2010.<sup>53</sup>

90. Smaller developing countries of the region, such as the Lao People's Democratic Republic, Cambodia, Bhutan, Armenia and Maldives, registered the highest private infrastructure investment to GDP ratios over the period 2008-2012 (see figure 7, panels a and b). Because of their narrower fiscal space, PPPs have more potential in supplementing public expenditure in these countries. At the same time, the overall socioeconomic environment of these countries, such as shallow domestic financial markets or relatively low population bases, may require the PPP model to be adjusted to local market circumstances. The development of PPPs therefore entails a delicate trade-off, based upon the specific situations in a country rather than a universally applicable solution.

91. Several factors have facilitated private sector involvement in infrastructure financing in the region. The most important one is, probably, the active role played by some Governments to establish an “enabling environment” for PPP development. The different elements of this enabling environment are further detailed below.

92. A clear policy is essential to set out a stable and long-term vision for PPP development in the Asia-Pacific region. PPP projects typically take several years to be developed and are often politically sensitive. As such, PPPs are vulnerable to government change, which could result in a position reversal regarding any PPP projects. At the same time, private operators face considerable costs when entering a market. For example, private operators have to carry out full due diligence of the legal and fiscal environment and are unlikely to do so if the policy direction of the Government is unclear.

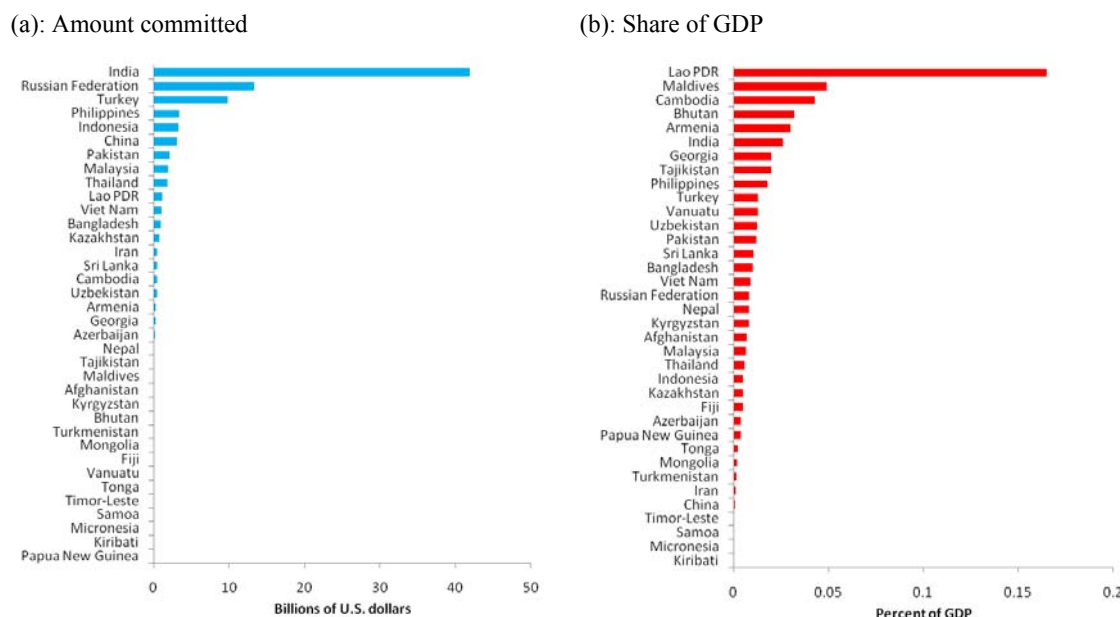
93. Against this backdrop, several Governments of countries in the region have developed a national strategy for PPPs which mitigate such political risk by building broad-based support and a long-term vision for the sector. A few examples in the region are the 2008 Australian National PPP Policy Framework, the 2010 Pakistan Policy on PPPs and the 2010 PPP Policy and Strategy in Bangladesh. Furthermore, an important innovation to promote

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<sup>53</sup> ESCAP, based on data from the World Bank PPI database. Available from <http://ppi.worldbank.org>

PPPs in India, which had been tried, was viability gap funding. It covered the Government bridging the gap in the viability of certain projects of high priority which would not be taken up normally for investment by the private sector due to poor commercial prospects. However, the initiative has not been successful.<sup>54</sup>

**Figure 7.** Private infrastructure investment in Asia Pacific economies, 2008-2012



Source: ESCAP, based on data from the World Bank. Available from <http://ppi.worldbank.org>.

94. In this context, legal and regulatory frameworks are critical to protect the rights of the private sector. The legal framework has to be clear with regard to what types of sector are eligible for PPP mechanisms, which authority is competent for approving PPP projects and what procurement rules have to be followed. Such clarity will limit the risk of challenges to the validity of PPP contracts and will facilitate the work of government officials. The availability of adequate dispute resolution mechanisms are also critical for creating the confidence that private sector rights will be protected. In this respect, some countries have developed a single act dealing with PPP, such as the Act on Private Participation (PPI Act) in the Republic of Korea, which came into force in 1999.<sup>55</sup>

95. Institutional arrangements that build internal capacity in implementing PPP projects are by nature relatively complex and require specific expertise. To build such expertise, many Governments have established specialized units or programmes to develop and supervise PPP projects. These play a “catalytic” role in promoting and developing PPP solutions as they enable the concentration and availability of required expertise through the accumulation of experience and the possibility of adequate training. Among the countries of the region, the following examples can be mentioned: the PPP Centre of the Philippines, the Kazakhstani

<sup>54</sup> More information is available from

[www.pppinindia.com/pdf/scheme\\_Guidelines\\_Financial\\_Support\\_PPP\\_Infrastructure-english.pdf](http://www.pppinindia.com/pdf/scheme_Guidelines_Financial_Support_PPP_Infrastructure-english.pdf).

<sup>55</sup> UNCITRAL Legislative Guide on Privately Financed Infrastructure projects, adopted in 2000, provide guidance on best international practices regarding legal framework development.

Centre of PPP or the Malaysian PPP Unit (3PU, also known as UKAS), but many more have been created (see box 8).<sup>56</sup>

Box 8: Kazakhstan Private-Public Partnership Center

The Kazakhstani Private-Public Partnership Center is a special joint-stock company fully owned by the Government of Kazakhstan created in July 2008. Its role includes: (a) examining PPP projects at all stages of their preparation; (b) preparing recommendations for governmental agencies on the development of legislation and methodological frameworks for PPP projects; (c) monitoring PPP projects during the course of development and construction; and (d) organizing seminars, training courses, conferences and other events related to PPPs. As of the time of writing, more than 30 projects had been approved by the Kazakhstan PPP Center. They include construction of motor roads, railways, hospitals, polyclinics, parking lots, a bus terminal, a light rail system, a garbage recycling plant and prisons. The total amount of investment in these projects is about \$3 billion. The new law on PPP signed in July 2013 introduced new forms of PPP contracts, such as build-operate-transfer (BOT), build-own-operate (BOO) and design-finance-build-operate (DBFO), as well as availability payments based on meeting specific project milestones or facility performance standards.

The new PPP law provides statutory protection for concession obligations against sequestering. It also provides special tariffs and exemptions from general tariff regulation to concessionaires that are natural monopolies, protecting them from the risk of having their revenues decreased by the Natural Monopoly Agency. Kazakhstan has successfully implemented PPP projects in the electrical energy sector. In 2005 the concession agreement between the Government of Kazakhstan and JSC Batys-Transit, a Kazakhstani company, was signed to build and operate of interregional overhead electric power transmission line for 500 kW in the North Kazakhstan-Aktobe area. The project attracted financing through the issuance of infrastructure bonds with a government guarantee. In view of Kazakhstan's large territorial coverage, the need to connect the electricity grids of regions such as West-Kazakhstan, Atyrau and Mangystau oblast (region), there is a large potential for the implementation of additional future PPP projects in the field of electrical energy.

Currently, the Eurasian Economic Commission is conducting preliminary work towards the creation of a common electrical market for the Common Economic Space (CES) countries. To keep Kazakhstan competitive vis-à-vis partner countries, the country should pay attention to the development of its domestic energy infrastructure, for which PPPs have proved to be very useful.

*Source:* ESCAP.

96. In addition to the above, there needs to be a body of financial support measures that ensure that projects are sufficiently profitable and safe for attracting private investors. Financial support measures can take various forms.

97. With the objective of bringing more bankable projects to the market, some countries have established project development facilities (PDF) to fund required preparatory activities, such as feasibility studies or recruitment of transaction advisors who help the government to structure PPP deals. Some countries have also developed mechanisms to facilitate the acquisition of land, which is often a major obstacle in infrastructure projects. For instance, the Indonesian Government has been operating land funds to partly cover the risk faced by private operators if land acquisition costs turn out to be significantly higher than projected.

98. Some Pacific economies, such as Fiji, Papua New Guinea and Samoa, are actively pursuing legislative and policy reforms to facilitate PPP. However, they face structural

<sup>56</sup> For a list of PPP units in the region, please refer to United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), "PPP Units and Programmes in Asia and the Pacific". Available from [www.unescap.org/resources/ppp-units-and-programmes-asia-and-pacific](http://www.unescap.org/resources/ppp-units-and-programmes-asia-and-pacific).

impediments due to their smallness and isolation. Such impediments have created obstacles to the inflows of private investment flows except to sectors such as mining and tourism.

99. Recognizing that some infrastructure projects are not viable on purely commercial terms, some countries have provided construction subsidies through mechanisms such as viability gap funding (VGF) schemes.<sup>57</sup> Providing such support is justifiable because the economic return on an infrastructure project might be higher than its financial return. Subsidies might be necessary to cap future user charges at an affordable level, thereby maintaining public access to services.

100. Some Governments have secured, partly or wholly, the future cash flow of infrastructure projects, thereby making it easier for the project company to access commercial loans. This has been done either by providing State guarantees, such as “minimum revenue guarantees”, “exchange rate guarantees”<sup>58</sup> or even “default guarantees”.<sup>59</sup> This has also been done by signing off-take agreements, whereby the Government commits to buy the product/service that will result from the infrastructure project on a long-term basis. For example, “power purchasing agreements”, which are a type of off-take agreement, have been critical to the success of PPPs in the energy sector. To facilitate access to credit, commercial insurance could also provide some risk coverage and national or multilateral development financing institutions (DFI) could issue credit guarantees or extend their preferred creditor protection to private lenders (see box 9).

101. Overall, the guarantees provided in connection with PPP projects might have substantial financial implications in the long run and should be carefully assessed. Therefore, it is important to ensure good governance in the way these financial support mechanisms are provided. Some countries have established a dedicated risk management unit (RMU) to assess and monitor contingent liabilities born by the public authorities, while other countries have created specific guarantee fund for isolating the risk.

102. There is also a growing demand and need to ensure that these guarantees are correctly reflected in national accounts. Monitoring and publishing the value of contingent liabilities, such as those arising from revenue guarantees, and introducing contractual clauses to restrict government risks should be assessed to avoid potentially disruptive future budget implications.<sup>60</sup>

103. PPP projects are heavily reliant on the availability of long-term financing. Commercial banks may, however, be unable to provide sufficient long-term loans because of potential asset-liability mismatches. Therefore, some countries have created specialized institutions, such as the Indian Development Finance Company (IDFC), to boost the provision of long-

<sup>57</sup> VGF is a construction subsidy designed to reduce part of the construction costs through a “one time” payment. This approach has been one of the factors behind the success of PPPs in India whereby it can contribute up to 40% of capital expenditures (the exact percentage is defined through bidding competition).

<sup>58</sup> Due to limited availability of long-term financing in local currency, project companies might have to borrow in United States dollars while their revenue stream is in the local currency thereby creating a currency mismatch. An exchange rate guarantee is aimed at protecting the private partner from local currency devaluation.

<sup>59</sup> “Default guarantee” means that the Government agrees to carry out the obligations of the PPP company vis-à-vis its lenders upon default, in order to enhance the creditworthiness of the operation.

<sup>60</sup> See e.g. Timothy Irwin and Tanya Mokdad, *Managing Contingent Liabilities in Public-Private Partnerships Practice in Australia, Chile, and South Africa* (Washington, D.C., World Bank, 2010) for a useful discussion.

term financing (mainly in local currency). Institutions such as the India Infrastructure Finance Company Ltd. (IIFCL) have also provided a refinancing option for the banking sector to free up funds for investing in newer infrastructure projects. In addition, dedicated infrastructure funds have been established to offer other long-term financing options.

#### Box 9: Eurasian Development Bank and PPPs in North and Central Asia

The Eurasian Development Bank (EDB)<sup>a</sup> ensures that the projects it supports have a significant social and economic impact; it calculates that they are capable of generating an average of \$4.27 billion gross output per year in EDB member state economies. The Bank's investment portfolio is also characterized by its multiplier effect—the additional output and production projects generate in associated sectors of the economy. In the long term, projects supported by the Bank – provided they continue to be operated directly – will be able to generate \$5.21 billion in additional output in member State economies.

One important indicator of the social impact of the Bank's investment activities is the new jobs such projects create. Estimates based on feasibility studies of projects financed by the Bank suggest they have already resulted or will result in the near future in the creation of over 22,000 permanent jobs in EDB member States. It is important to note too that the implementation of EDB-supported projects should increase tax and other State and local exchequer revenues. Average annual payments generated by such projects should reach \$763 million while they are being financed by the Bank.

The EDB realizes several public-private partnership (PPP) projects. One of them is reconstruction of Pulkovo Airport in St. Petersburg, the Russian Federation. Pulkovo Airport is the only air hub in the Russian Federation's northern capital and northwest Russia's only airport with significant potential to increase transit traffic; it was a considerable investment prospect. The region's authorities decided to upgrade the airport using the public-private partnership (PPP) model—a solution unprecedented in the Russia Federation at the time. This meant that the airport was placed into concession. An international consortium was set up to implement the project: Northern Capital Gateway comprises VTB Capital, Fraport AG (a global airport operator) and Copelouzou (a Greek investment group). In April 2010, Northern Capital Gateway signed a 30-year PPP agreement with the St. Petersburg authorities. The agreement governs the construction, reconstruction and operation of Pulkovo Airport in St. Petersburg and transferred operational control over to the consortium.

Project financing agreements were also signed in 2010 between the parties to the PPP agreement and a group of banks, including Eurasian Development Bank (EDB), the European Bank for Reconstruction and Development, the International Finance Corporation, the Nordic Investment Bank, the Black Sea Trade and Development Bank, Vnesheconombank and a number of commercial banks. The total financing package is worth approximately €692 million with EDB's share being €66 million. Experts have assessed the Pulkovo reconstruction as the Russian Federation's most successful transport PPP project. It stands out partly because all the financing has been provided by the private partner, that has also taken on 100% of the risk associated with demand. The credit margin and banking fees were determined on purely competitive terms on the international financial markets. This was EDB's first PPP project in the Russian Federation.

Because of the project's structure, and taking into account its scale and the number of participants, a transparent investment mechanism needed to be put into place after the PPP agreement had been signed. The mechanism makes it possible for partnering banks to coordinate their operations and for the agent bank to factor in the individual requirements of each of the lenders when finalizing transactions.

Another example of PPP project with participation of EDB is construction of the Western High-Speed Diameter toll road (WHSD) in St. Petersburg. WHSD is the world's largest public-private partnership in toll-road construction. Total investment in the project is expected to reach \$6 billion. WHSD is a public-private partnership project undertaken by the municipal authorities in St. Petersburg together with Northern Capital Highway, a consortium comprising the VTB Group (the main shareholder) and Gazprombank.

<sup>a</sup> More information is available from [www.eabr.org/e/](http://www.eabr.org/e/).

Source: ESCAP.



104. Credit enhancement mechanisms are also being experienced to try to capitalize more on resources from institutional investors such as insurance companies or pension funds. Through these credit enhancement mechanisms, the idea is to issue project bonds with a higher credit rating thereby making these bonds more acceptable to this type of investor. What can be concluded from the above is that Governments have to take appropriate actions to create an enabling environment for PPP development. With a strong enabling environment, the potential of private financing in infrastructure development in the region can be unlocked. In this respect, best practices have emerged from successful experiences in the region. Promoting exchange of information and cross-country learning is therefore critical and can be done through participation in knowledge networks such as those promoted by ESCAP.

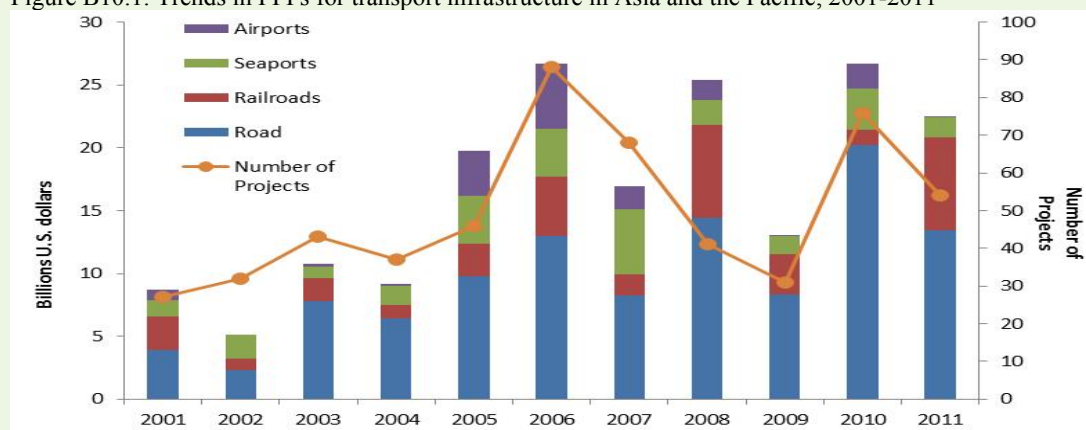
105. While developing their policies, Governments have to keep in mind that PPP solutions are not suitable for all type of projects. Even in countries where PPPs have been intensively pursued, they rarely reach 20% of public infrastructure projects.<sup>61</sup> In this respect, it is worth noting that PPP has been a particularly promising avenue in revenue-generating sectors, such as energy, ICT and transport, where user charges can be used to repay the investment (see box 10).

#### Box 10: PPP for transportation services in Asia and the Pacific

Globally, PPPs have been a promising avenue for transport infrastructure development. As illustrated in the chart below, countries in the region have also managed to mobilize significant resources through PPPs, with private funding for transport infrastructure projects amounting to over \$20 billion in 2011.

The geographic distribution of transport PPPs in the region remains, however, somewhat unbalanced with India, the Republic of Korea, Australia and China accounting for more than 80% of the total investments. In this regard, other countries may learn from these leading countries in PPPs.

Figure B10.1: Trends in PPPs for transport infrastructure in Asia and the Pacific, 2001-2011



Source: ESCAP, based on data from the Public-Private Infrastructure Advisory Facility (PPIAF) Database, the Korea Development Institute's Public and Private Infrastructure Investment Management Center (PIMAC) and the Infrastructure Australia website ([www.infrastructureaustralia.gov.au](http://www.infrastructureaustralia.gov.au)).

Note: For high-income countries, only projects for the Republic of Korea and Australia were included in the analysis.

Source: ESCAP.

<sup>61</sup> ESCAP, *Review of Developments in Transport in Asia and the Pacific 2013: Transport as a Key to Sustainable Development and Regional Integration* (Bangkok, 2013).



*Key issues and challenges*

106. Countries in the Asia-Pacific region need to identify projects and programmes at the sectoral level to engage the private sector in infrastructure development. Relevant policy issues may include the following:

- *PPP project pipeline:* Governments need to support proactive and effective policy actions to mobilize private resources through PPPs in long-term development projects. Policymakers should also institutionalize policies to set up conditions for generating a steady flow of PPP projects and to stimulate government contracting agencies (GCA), such as ministries, to consider PPP solutions for infrastructure development.
- *Institutional frameworks:* Governments must establish institutional frameworks that support project identification and preparation, promote good governance in procurement and ensure adequate monitoring. Designing institutional arrangements is necessary for countries to understand the viability and their impact on development.
- *PPP cost-sharing and risk-sharing mechanisms:* Typical PPP projects rely heavily on debt financing. Meanwhile, the private sector faces higher borrowing costs than the public sector. This suggests that there should be better public sector policy support for risk- or cost-sharing mechanisms that will facilitate access to finance for PPP projects at a reasonable cost, while keeping the impact on public finance sustainable in the long run.
- *Harmonize PPP legislation:* National policies relevant to PPP projects should be harmonized to reduce any contradictory policies and to reduce uncertainty for the private sector. In particular, effective coordination between PPP, land and environment policies should be established to avoid unexpected difficulties and delays in the implementation stage. This will help create mechanisms to harmonize national policies, especially related to dedicated PPP laws.
- *Inclusive PPPs:* Policies need to ensure that PPP mechanisms can benefit all citizens and do not result in more exclusion. In particular, policies need to ensure that the “user-pays” mechanisms do not exclude the poorest citizens from basic public services or that less densely populated areas with a lower commercial profitability are not underserved by PPPs.

## VIII. Innovations in climate finance

107. Over the years, climate change has become one of the key emerging development challenges in the Asia-Pacific region because of the related negative impact of environmental degradation, such as air pollution and depletion of biodiversity, among others. In addition, climate change is likely to have a detrimental impact on food production as a result of the erosion of fertile agricultural land, which will put pressure on food security and require investments and research to increase agricultural yields. The risks to food security are particularly important for the poor and for the most vulnerable populations and communities in the region. Weather-related economic losses, which are likely to be associated with climate change, are other areas of concern.<sup>62</sup>

108. According to the World Risk report 2013, of the 15 countries most exposed to natural hazards and climate change-related risks exposure, 9 are in the Asia-Pacific region. These countries are Vanuatu, Tonga, Philippines, Japan, Brunei Darussalam, Bangladesh, Cambodia, Solomon Islands and Fiji.<sup>63</sup> Least developed countries, landlocked developing countries and small island developing States are mostly vulnerable to climate-related disasters due to their exposure to earthquakes, storms, floods, droughts and sea-level rise. The total estimated losses due to natural disasters in the Asia-Pacific region during the period 2003-2013 amounted to \$750 billion, representing 49.5% of the global economic losses due to natural disasters during this period. The average annual losses in the Asia-Pacific region over the same period amounted to 48.3% of the global losses.<sup>64</sup>

109. In order to implement policies and strategies to minimize the economic and human costs of climate change, countries need to adopt smart climate financing mechanisms. Financing related to climate change involves two areas: financing of mitigation, which benefits both donor and recipient countries, and financing for adaptation, which provides support to recipient countries to adapt to the consequences of climate change and to make them more resilient to natural shocks (see box 11).

110. To meet the significant financing requirements for adaptation and mitigation, Asia-Pacific economies will have to adopt strategies to increase the efficiency and effectiveness of energy use, among others. They will also need to encourage the development of new technology and innovations in partnership with the private sector. In view of these climate-change-related consequences, several countries in the region, including China, India, Indonesia, Thailand and Viet Nam, have introduced national climate action and finance policies (see box 12).

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<sup>62</sup> See "Stern review on the economics of climate change" (London, HM Treasury, 2006). Available from [http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/sternreview\\_index.htm](http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/sternreview_index.htm). The report noted: "New analysis based on insurance industry data has shown that weather-related catastrophe losses have increased by 2% each year since the 1970s over and above changes in wealth, inflation and population growth/movement. If this trend continued or intensified with rising global temperatures, losses from extreme weather could reach 0.5 - 1% of world GDP by the middle of the century".

<sup>63</sup> Alliance Development Works, *World Risk Report 2013* (Berlin, 2013). Available from [www.worldriskreport.com/uploads/media/WorldRiskReport\\_2013\\_online\\_01.pdf](http://www.worldriskreport.com/uploads/media/WorldRiskReport_2013_online_01.pdf).

<sup>64</sup> ESCAP, based on data from EM-DAT. Available from [www.emdat.be/](http://www.emdat.be/) (accessed on February 2014)

Box 11: Financing climate change adaptation and mitigation in the Pacific<sup>a</sup>

Improving access to, and management of, climate change resources for addressing national priorities and working to improve national capacity has been the focus of policymakers in the Pacific over the past few years. Pacific island countries have considered a number of different modalities at the national, regional and international levels that might help countries increase their access to climate change resources, as well as provide a framework for flexible management of these resources for more efficient implementation.

It is clear that there is no “one size fits all” approach. With the varying sources of funds available and different capacities of countries, a mix of modalities need to be considered for implementation simultaneously. There are some modalities that have been tested and proven to provide means for more effective access and management while maintaining consistency with best practice principles of aid effectiveness and donor harmonization, use of country systems and strengthening existing mechanisms to provide better services to Pacific countries and their particular circumstances. Other modalities that may be more effective are also being explored. Some of these modalities include:

- Direct budgetary support (and sectoral support) presents one of the most effective modalities to address climate change challenges in a sustainable way. Use of national systems is the preferred modality<sup>b</sup> and policymakers have noted that where national systems have existing or emerging capability gaps, existing technical assistance facilities need to be utilized to assist countries to improve their systems to meet those requirements. This can be achieved either through capacity-building and/or supplementation.

The degree to which this issue is successful depends heavily on the reflection of climate change priorities and challenges within national and sector plans and their budgets. It requires robust, transparent and accountable public financial management systems and a monitoring and evaluation framework that provides accountability at the national level and for development partners.

- National trust fund arrangements have been tried and tested in the Pacific region for some time and offer a very good modality for climate change resources to accrue over time and facilitate disbursement rates that are commensurate with the capacity (human, institutional, and absorptive). Building on existing trust arrangements offers a good option (for example, augmenting the Tuvalu Trust fund to accommodate climate change funds); a regional or subregional fund can present significant benefits in well-defined sectors/areas, such as infrastructure, specific health challenges and energy.

The application of such models to broad areas such as climate change may present more difficulties in designing the appropriate governance, equity, financial management and instruments. It is clear that the design of any fund must be based on clearly articulated needs and requirements by participating recipient and donor partners. Given the limited institutional capacity of some smaller Pacific nations, a subregional fund also has the potential to provide economies of scale and reduced overall administrative costs of several individual funds, and – a regional technical support mechanism (that would identify funding opportunities and provide technical assistance in applications and implementation) is being explored through the Council of Regional Organisations in the Pacific (CROP).

<sup>a</sup> See ESCAP, *Green Economy in a Blue World, Pacific Perspectives* (Fiji, 2012). See also for further information: Secretariat of the Pacific Regional Environment Program (SPREP), *Mobilizing Climate Change Finance for the Pacific* (2010); Discussion papers prepared by the Pacific Islands Forum Secretariat for consideration by Forum Economic Ministers’ Meetings, 2011-2013; and Joint Communiqué, Facilitating Climate Change Financing for the Pacific Region Round Table Meeting, 2013.

<sup>b</sup> Joint Communiqué by Ministers on Facilitating Climate Change Financing, Joint Communiqué, Facilitating Climate Change Financing for the Pacific Region Round Table Meeting, Edgewater Resort & Spa 11-12 April 2013; 2011 and 2012 Forum Economic Ministers’ Meeting Action Plans.

Source: ESCAP.

## Box 12: National climate action and finance policies in China, Kazakhstan and Viet Nam

**China:** In recent years, China has achieved some important successes in its climate actions, mainly in the form of improvements in energy efficiency and in slowing the rate of emissions growth. Its climate strategy and action is developed and managed by a wide variety of government bodies, such as: the State Council; the National Leading Working Group on Addressing Climate Change; the National Development and Reform Commission (NDRC); the Department of Climate Change; and the Ministry of Finance.<sup>a</sup>

The China Energy Efficiency Financing Program (CHUEE) has achieved some important objectives: 178 loans were disbursed by 3 partner financial institutions (FIs); a total loan of \$783 million; a total investment of \$1.77 billion; an annual GHG emissions reduction of 19.3 million tons CO<sub>2</sub>e; 37% of the project is located in China's frontier regions. The expected impacts of the programme are to achieve a \$2 billion cost saving thanks to energy savings of 12.2 million megawatt hours annually, and 7 million metric tons of carbon dioxide emissions avoided in a year.<sup>b</sup> Climate finance in China comes from both domestic and foreign sources, which can be grouped into five categories: public finance (domestic and international); carbon market finance (essentially through the Clean Development Mechanism; mainstream private sector finance (such as domestic and foreign bank loans); direct investment (domestic and foreign); and charitable and NGO finance.

In 2011, the climate finance loan balance from China's State-owned banks totalled approximately \$294 billion. Direct government climate spending was about \$41 billion for the year by comparison, while private sector investment was at least \$10 billion. In contrast, overseas sources of climate finance are smaller: OECD government funding in the period 2006-2009 was about \$1.68 billion, while multilateral funds provided just \$0.29 billion for the period 2008-2012. The extent of foreign private sector debt financing for climate action is unclear, but is estimated to only account for a fraction of the \$70.5 billion of total foreign funding. The Clean Development Mechanism (CDM) has been a more significant source of low carbon financing, pulling in an estimated \$9.3 billion.<sup>c</sup>

**Kazakhstan:** The city of Almaty endeavours to develop an area-wide emission trading bubble as a cost-effective means of achieving its air emission reduction goals. Almaty has a persistent air quality problem. Under the contemplated "cap-and-trade" programme, 1,200 companies that operate with proper authorizations within the city limits will be allocated a five-year stream of emission allowances. To achieve the air quality goal of 7-10% annual reduction from industrial sources in the city, the allocated emission allowances will be reduced by 7% (of initial baseline) per year.

The companies will be required to operate within their emission allowances or purchase additional permits from other companies to cover any excess emissions. Firms that succeed in reducing their emissions by more than 7% a year would be allowed to bank the surplus allowances for future use (up to 3 years) or to sell them to other firms. The city expects that aggregate emissions will be reduced by 7% as under compliance of high-cost pollution abaters are offset by over compliance of the low-cost abaters. A significant source of capital to finance emission reduction at those companies that have the opportunity (i.e. are low-cost abaters) but lack the capital would come from new and expanding companies which could buy into the bubble.

Participating companies will be charged fees to hold, bank and trade allowances. The revenues collected from these fees will be used to finance monitoring and enforcement, thereby ensuring the financial self-sufficiency and sustainability of the programme. As the programme is still in the design stage, it is not possible to predict if it will work envisioned; yet, the interest and commitment of the city and national policymakers to effective financing of environmental improvements directly by the polluters is not in question.

**Viet Nam:**<sup>d</sup> Viet Nam has been remarkably successful in its attempt to integrate climate finance policies with green growth strategies. It is among the countries most vulnerable globally to climate change: over the past decade, climate change-related disasters, mainly in the form of storms and floods, have caused damage estimated to be 2-6% of GDP per year.

The socioeconomic development plan for the years 2011-2015 acknowledges climate change as a threat to development and is committed to improve natural resource and disaster risk management. The Green Growth Strategy is divided into three tasks: The first task is aimed at reducing GHG emissions by 8-10% by 2020, compared with 2010 levels. The second task targets the greening of production in order to encourage the development of a green industry. The third task entails the greening of lifestyles and the promotion of

## Box 12: (continued)

sustainable consumption. The Government is committed to invest in climate change projects worth \$1 billion per year. The main challenge ahead is the implementation of a green growth strategy for which about \$30 billion will be needed by 2020.

<sup>a</sup> China, the Climate Group, “Shaping China’s climate finance policy: executive summary”, November (2012). Available from [www.theclimategroup.org/assets/files/executive\\_summary\\_china.pdf](http://www.theclimategroup.org/assets/files/executive_summary_china.pdf).

<sup>b</sup> China Energy Efficiency Financing Program (CHUEE), William Beloe, Senior Operations Officer, International Finance Corporation. Available from <http://lowemissionsasia.org/events/presentations-climate-finance-workshop#sthash.Cd9Jzuuu.dpuf>.

<sup>c</sup> The Climate Group, “Shaping China’s climate finance policy” (March 2013).

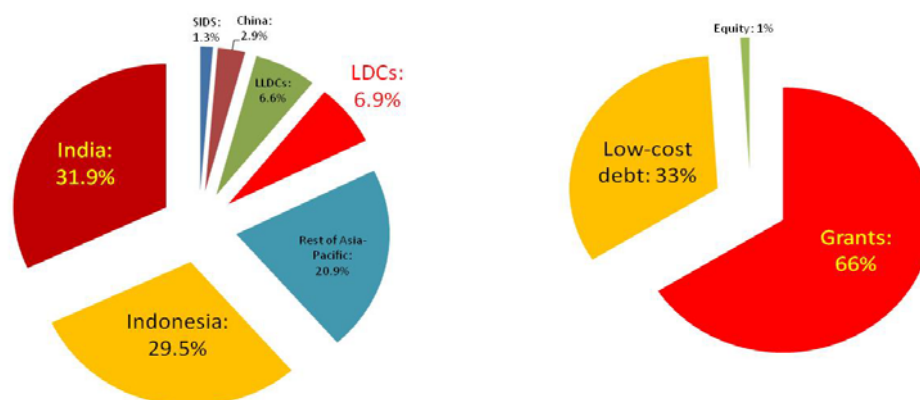
<sup>d</sup> Highlights of the Viet Nam Green Growth Strategy and financing implementation, by Dr. Pham Hoang Mai of MPI.

Source: ESCAP.

111. To follow up on the Copenhagen Accord of 2009, and the Cancun and Durban meetings, developed countries committed to jointly mobilize \$100 billion a year from public and private sources in climate finance by 2020. Key players in climate finance include private commercial banks and infrastructure funds, which have distributed about \$38 billion, including project-level debt and direct investments.<sup>65</sup>

112. An overview of the Asia-Pacific climate finance landscape highlights the importance of financing requirements to advance the sustainable development agenda. The Asia-Pacific region received about 54% of the total approved spending of global climate funds, which amounted to nearly \$11.5 billion since 2002.<sup>66</sup> Among these climate funds, 66% were from grants, with the European Global Energy Efficiency and renewable Energy Facility.<sup>67</sup> However, the distribution of climate funds in the region has been uneven, and often the most vulnerable countries have failed to receive the necessary financing to address the climate change related impacts (see figure 8).

**Figure 8.** Global climate fund in Asia-Pacific economies



Source: ESCAP, based on data from [www.climatefundsupdate.org/data](http://www.climatefundsupdate.org/data).

<sup>65</sup> Climate Policy Initiative, *The Global Landscape of Climate Finance 2013* (San Francisco, 2013).

<sup>66</sup> [www.climatefundsupdate.org/listing](http://www.climatefundsupdate.org/listing).

<sup>67</sup> Climate Policy Initiative, *The Global Landscape of Climate Finance 2013* (San Francisco, 2013).

113. In 2012, multilateral development banks (MDBs) disbursed a total of \$27 billion in climate finance, of which 78% or \$21 billion was dedicated to mitigation and 22%, or \$6 billion to adaptation. Of total commitments, 8%, or \$2 billion came from external resources, such as bilateral or multilateral donors, including the Global Environment Facility and the Climate Investment Funds. ADB contributed 12% of the total MDBs disbursement, or \$3.28 billion. The World Bank disbursed 41% of the total investment, or \$11.07 billion. Of the total investment, \$3.73 billion, or 14%, was used for projects in South Asia, and \$4.32 billion, or 16%, in East Asia and the Pacific. World Bank lending with adaptation co-benefits in South East Asia reached \$600 million in fiscal year 2013. Lending with mitigation co-benefits in East Asia and the Pacific reached \$1.3 billion.

114. A total of 21 climate funds and dedicated initiatives are active in the Asia-Pacific region, including 15 multilateral funds, 5 bilateral initiatives and 1 national fund. The largest contributions come from the World Bank's Clean Technology Fund (CTF), which has approved \$763.25 million to fund 19 projects, mostly in the form of concessional loans. The Governments of Germany, Japan, Australia, Norway and the United Kingdom of Great Britain and Northern Ireland have altogether provided more than \$500 million for projects in the Asia-Pacific region through their respective bilateral climate funds and initiatives.<sup>68</sup> More than two thirds of the climate finance directed to Asia and the Pacific since 2003 has supported mitigation activities. India, China and Indonesia have received 49% of the funding approved for Asia since 2003.

115. According to one regional report the amount of climate finance required in the period 2010-2020 amounts to \$10 trillion globally or about USD 1 trillion per year.<sup>69</sup> The Green Climate Fund is expected to contribute only \$100 billion per year by 2020. With the current level of climate finance ranging between \$200 billion and \$360 billion, the gap to be filled corresponds to approximately \$640-800 billion. The geographic allocation of investment is distorted, with India and Thailand receiving more than 80% of the funding alone.

116. The private sector's share of climate finance in 2012 was estimated to be \$230 billion; therefore, in order to fill the gap, it has to roughly triple in size.<sup>70</sup> The public sector's share of climate finance is structured as follows: \$35 billion were pledges by donor countries; \$26 billion were deposited into climate funds globally; \$9 billion were approved to finance projects globally. Of this, \$1.6 billion was approved in the 11 Low Emissions Asian Development (LEAD) focus countries in South and South-East Asia. Public and private sector climate finance in the LEAD focus countries is currently less than \$10 billion per year, of which 17.8% comes from the public and 3.5% from the private sector. The investment volume needs to increase by 14 times compared with the current level of \$144 billion.

117. Financing action to reduce emissions from deforestation and forest degradation (REDD) synergizes climate action with other sustainable development objectives, including

<sup>68</sup> The Asia-Pacific region received about 40% of OECD-DAC aid to climate change mitigation, based on data available from OECD Data Lab. Available from [www.oecd.org/statistics](http://www.oecd.org/statistics).

<sup>69</sup> USAID, "Fast out of the gate: how developing Asian countries can prepare to access international green growth financing", presentation presented at the Asia LEDS Partnership Workshop, Manila, Philippines, April 2013. Available from <http://lowemissionsasia.org/events/presentations-climate-finance-workshop#sthash.jpKa3Q5R.dpuf>.

<sup>70</sup> Buchner, B., Herve-Mignucci, M., Trabacchi, C., Wilkenson, J., Stadelmann, M., Boyd, R., Falconer, A., and Micale, V., 2013, "Landscape of Climate Finance." Climate Policy Initiative (CPI).

biodiversity and forest protection and sustainable livelihoods. The Asia-Pacific region, despite its significant contribution to greenhouse emissions related to forest loss, receives only a small proportion of global REDD investments, and these investments are concentrated in a few countries in the region. Box 13 describes some of the governance and capacity challenges that need to be addressed even when finances for climate action are available.

#### Box 13: REDD+ in Asia and the Pacific

Deforestation and forest degradation contribute more than 10% of global greenhouse gas emissions, of which the Asia-Pacific region is a major contributor. Not only do deforestation and degradation contribute to climate change, they also affect the livelihoods of forest-dependent people and lead to a reduction in global food security. In addition, deforestation threatens the availability of a wide range of ecosystem services and decreases biodiversity. The direct drivers of deforestation and degradation include logging, mining, infrastructure development and agricultural expansion, especially for industrial plantation crops. A key indirect driver of forest destruction is that many services that forests provide do not have a market value. Reduced Emissions from Deforestation and Forest Degradation (REDD+), a concept introduced during the discussions of the United Nations Framework Convention on Climate Change Conference of Parties in 2005 (CoP 11), is trying to change this by creating a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forest lands and invest in low-carbon paths through sustainable development. “REDD+” goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (see paragraph 70 of the 2010 Cancun Agreements).

Since 2007, \$2.72 billion has been pledged to five multilateral climate funds (including the UN-REDD Programme, a collaborative initiative between FAO, UNDP and UNEP) and two bilateral initiatives that support efforts to reduce emissions from deforestation and forest degradation. 52% of the funding pledged had been deposited in 2013. Through these funds and initiatives, \$906.5 million has been approved for REDD activities since 2008. Finance is not only channelled through multilaterals. According to the REDD+ Partnership Voluntary Database, the total is in the order of \$6.8 billion, but this is for the 2006 to 2018 period and includes also direct bilateral support. Figures on the regional distribution of REDD+ finance are somewhat nebulous, as some sources report disbursed funds while others report committed funds. According to the Climate Funds Update, the Asia-Pacific region received about 6% of the total funding. With the exception of Indonesia and Viet Nam, countries in Asia and the Pacific are still getting ready for REDD+. The UN-REDD Programme is supporting national REDD+ readiness efforts in 51 partner countries, of which 15 are located in Asia and the Pacific. In Viet Nam, the Ministry of Agricultural and Rural Development (MARD) and FAO, UNDP and UNEP, signed the UN-REDD Viet Nam Phase II Programme document in July 2013, after a thorough and consultative development process. The Programme was officially launched in October 2013 and is assisted by a \$30 million grant by the Government of Norway. Other countries in the Asia-Pacific region with full national UN-REDD programmes or receiving targeted support include Bangladesh, Bhutan, Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, Solomon Islands and Sri Lanka.

With support from the UN-REDD Programme, numerous countries have developed REDD+ road maps to guide their efforts in Phase I of REDD+ and to obtain further funding (beyond what the UN-REDD Programme is able to provide). Until the end of 2013, only Indonesia, the Philippines and Viet Nam had developed a National REDD+ Strategy (or Action Programme in Viet Nam). Although a multitude of development partners are involved in capacity-building efforts, capacity remains weak in most countries. Other key challenges include weak cross-ministerial coordination and only embryonic private sector involvement. In addition, in many countries REDD+ is viewed as a forestry project, while key drivers are often in the agricultural sector. Also, the unfulfilled high expectations of “billions of dollars” have led to some fatigue in getting ready. On the other hand, an increasing number of countries have made progress in developing national forest monitoring systems, government agencies are actively engaging civil society and indigenous peoples’ representatives in planning processes, and safeguards (see Annex 1 of Cancun Agreements) are receiving serious attention. Interest in broader approaches to building natural capital and transforming towards a Green Economy has also increased steadily.

Source: UN-REDD UNEP.



118. An innovative area in leveraging funds to tackle climate change is the financing raised from green bonds (see box 14). In 2013, \$11 billion was raised globally through green bonds; this amount is expected to reach about \$50 billion by 2015.<sup>71</sup> However, institutional investors contributed globally only about 0.2% of total financing raised for climate change mitigation and adaptation.<sup>72</sup> At the regional level, the Asia-Pacific region received one fourth of all global climate finance investments. Private investment into renewable energy projects in China was \$68 billion and India received \$5 billion.<sup>73</sup>

#### Box 14: Green Banking in Bangladesh

Recognizing the important role of the financial sector in creating opportunities for green business and development, the Government of Bangladesh has introduced development strategies that included directions to the banking sector in this regard, which the Central Bank took a step further by issuing green banking guidelines in 2011. These introduced disclosure and reporting requirements for environmentally friendly and green financing on quarterly basis and created favourable conditions for investment in environmentally sustainable sectors and stimulated the emergence of green investments.

In the span of two years, these investments have reached various sectors of the economy, from renewable energy projects to green buildings, as well as important funds such as Bangladesh Climate Change Trust Fund (BCCTF), Bangladesh Climate Change Resilience Fund (BCCRF) and green financing to promote solar energy, biogas plants, effluent treatment plants and energy efficient installations. The boom of these investments is in biogas energy plants, which by November 2012 amounted to 850 in over 5 districts, and are projected to grow to 5,000 plants by 2015, while long-term projections reach 20,000 biogas plants by 2020.

Source: ESCAP.

119. A United Nations Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing recognized the significant multiplier role in the collaboration between multilateral development banks and the United Nations system to leverage additional green investments.<sup>74</sup> Giving confidence to countries that such resources will be spent wisely and accessed quickly is raised as an important point in gaining credibility.

120. In this regard, United Nations agencies<sup>75</sup> are providing technical support to several Asia and the Pacific countries to get a better understanding of public financial management processes and how they relate to climate change, including the resource allocation process for climate actions through the national budget within the context of the Climate Public Expenditure and Institutional Review (CPEIR) methodology.<sup>76</sup>

<sup>71</sup> See [www.economist.com/news/finance-and-economics/21599400-bonds-tied-green-investments-are-booming-spring-air](http://www.economist.com/news/finance-and-economics/21599400-bonds-tied-green-investments-are-booming-spring-air).

<sup>72</sup> The United Nations estimated in 2012 that pooling innovative mechanisms could generate over \$400 billion annually. United Nations, *World Economic and Social Survey* (New York, 2012). Available from [www.un.org/en/development/desa/publications/wess2012.html](http://www.un.org/en/development/desa/publications/wess2012.html).

<sup>73</sup> Sam Barnard and others, "Climate finance regional briefing: Asia and Pacific", *Climate Finance Fundamentals*, No. 8 (November 2013). Climate Funds Update. Heinrich Boll Stiftung and ODI. Available from [www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8679.pdf](http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8679.pdf).

<sup>74</sup> United Nations, *AGF 2010. Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing*. New York. Available from [www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF\\_reports/AGF%20Report.pdf](http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF%20Report.pdf).

<sup>75</sup> UNEP helps countries and their National Implementing Entities (NIEs) in the Asia-Pacific region to get accredited to and develop projects for the Adaptation Fund. It builds readiness to access financial resources through Adaptation Fund's (AF) accreditation process of National Implementing Entities (NIE) and formulation of projects. Available from [www.unep.org/roap/Activities/ClimateChange/NIESupportProgramme](http://www.unep.org/roap/Activities/ClimateChange/NIESupportProgramme).

<sup>76</sup> See UNDP's programme on the Governance of Climate Change Finance for Asia-Pacific: Available from <http://climatefinance-developmenteffectiveness.org/>.



*Key issues and challenges*

121. To meet the growing need of financing, Asia-Pacific countries must strategically identify new and innovative climate financing mechanisms. Relevant policy issues may include the following:

- *Sharing experiences and technologies:* Several countries need to ensure more financial resources, technical assistance and cooperation to help others access affordable technologies. Clean development mechanism projects and addressing the challenges of livelihood and food insecurity are primary concerns for many countries in the region. Policies must be there to share cost-effective way to transmit technology among countries in the region.
- *Green bonds:* Asia-Pacific countries need to promote and be a part of a framework to promote green bonds for climate change adaptation and mitigation. Policies are also required for credit risk sharing mechanisms for private sector-led project investments.
- *Blending type financing mechanisms:* Asia-Pacific economies need to create blending-type financing, which involves subsidizing private sector investment by combining donors' concessional funds with non-concessional investor funding. Policymakers are looking for in the future for blending-type mechanisms in the region.
- *Implementing innovative tax reforms:* There is plenty of scope for Governments to act together at the regional level to impose taxes on the operations of the corporate sector, particularly those that contribute to environmental damage. For instance, a tax on the use of fossil fuels could encourage a more energy-efficient production of goods and services. In addition, a tax on carbon dioxide emissions could generate large sums of revenues.

122. It should be kept in mind that the progress of increasing funds for climate change will require steady transformation of the global aid architecture; innovation of development assistance modalities and efficient regional partnerships mechanisms.

## IX. Mobilizing external resources

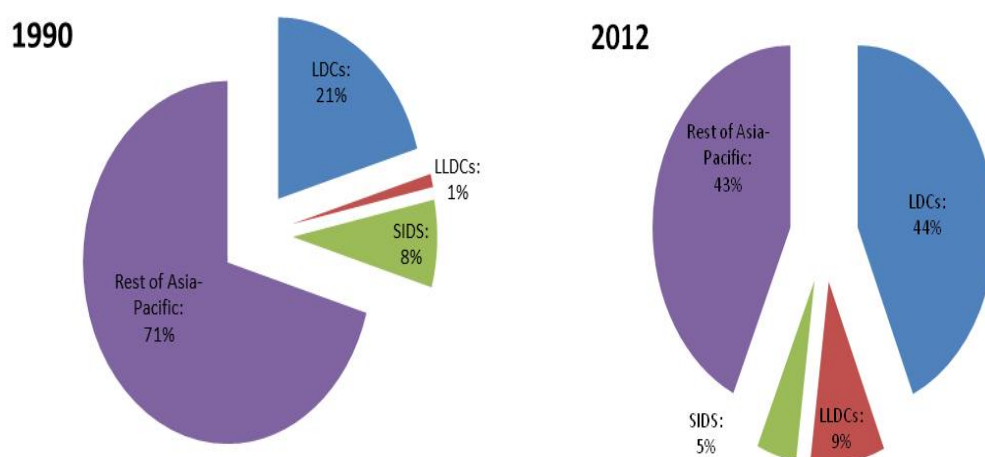
123. External resources are important to augment domestic financial resources to meet the development financing requirements. In many developing economies, especially in least developed countries and fragile States, substitution of domestic resources for foreign exchange is often difficult in short-to-medium-term development policymaking. Developing economies, especially low income and vulnerable economies therefore continue to require substantial external funding. In this context, it is important to discuss the potential of other traditional sources of external financing, such as ODA, FDI and remittances.

124. External resource inflows will not only come from public sources, such as ODA and multilateral development financial institutions, but will also need to be generated from private sources, including FDI, remittances and other innovative and emerging sources. Foreign portfolio investment and South-South and triangular development cooperation provide additional channels for funding development programmes. Furthermore, international borrowings, export-import bank lines of credits and public-private partnerships are also important instruments of financing for sustainable development in the Asia-Pacific economies in varying degrees as discussed in the following sections.

### A. Official development assistance

125. Traditional external sources of financing, including ODA, only partially contribute to meeting the region's resource requirements for sustainable development. ODA flows to the Asia-Pacific region reached \$30 billion in 2012, representing only 23% of the global ODA flows. However, ODA remains a significant source of development finance for least developed countries and small island developing States in the Asia-Pacific region. The least developed countries in the region received \$12.4 billion in 2012, or 41% of the region's ODA, doubling their share of 21% in 1990 (see figure 9).

**Figure 9.** Distribution of ODA in Asia-Pacific economies, 1990 and 2012



Source: ESCAP statistics. Available from [www.unescap.org/stat/data/statdb/DataExplorer.aspx](http://www.unescap.org/stat/data/statdb/DataExplorer.aspx).

126. ODA has helped leverage global partnerships which have extended to some critical social financing including offering innovative solutions for health financing. The AIDS

global public-private partnership is one such response that is well known for its significant successes in leveraging finances (see box 15).

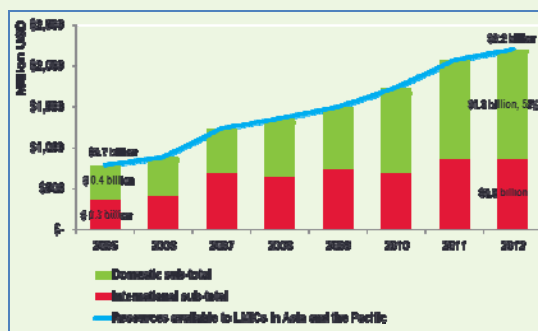
#### Box 15: Health financing strategies: a case of AIDS response

In just over a decade, global financing for AIDS increased significantly, reaching the highest levels ever in 2012 at \$19 billion. The Asia-Pacific region has mirrored this global trend, with estimated regional spending related to HIV rising from \$700 million in 2005 to \$2.2 billion in 2012. Globally and regionally, international funding for HIV has been, and continues to be, critical to sustaining the initial momentum for funding HIV programmes. Through intense and focused advocacy over the last decade—including the calling for shared responsibility as a mechanism to achieve AIDS targets and commitments under the 2011 Political Declaration on HIV/AIDS—the international community is now negotiating new partnership compacts based on shared responsibility and global solidarity for a more sustainable HIV response.

To achieve globally agreed targets, UNAIDS estimates that approximately \$5.4 billion must be mobilized in low- and middle-income countries in Asia and the Pacific—a shortfall of \$3.2 billion on current spending levels. Many countries in the region continue to rely heavily on international assistance. Notably, the BRICS countries (Brazil, Russian Federation, India, China, and South Africa) contribute to more than half of all domestic spending on AIDS in low- and middle-income countries. As the region's economic growth continues, further reducing eligibility for a shrinking pool of international donor funding, the importance of assured sustainability of domestic funding is clear, particularly given the life-long need for treatment.

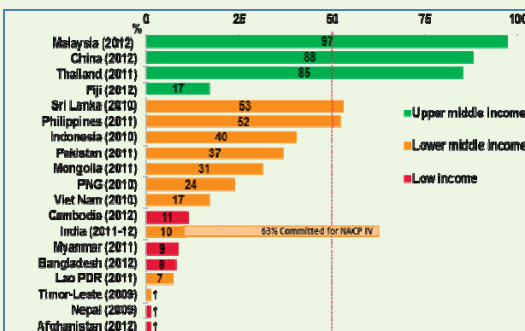
Since 2005 there have been steady increases in domestic public spending from \$400 million in 2005 to \$1.3 billion in 2012 (figure B15.1), representing 59% of total AIDS spending compared with the global average of 53%. Of the 10 countries with the highest HIV burden, three of them, namely Malaysia, China and Thailand, fund most of their AIDS response domestically. India has committed to finance more than 60% of its response from domestic sources from 2014 (figure B15.2).

**Figure B15.1: Resources available for AIDS response in Asia and the Pacific, low-and middle-income countries (LMIC)**



Source: UNAIDS estimates 2012, Global Report: UNAIDS Report on the Global AIDS Epidemic 2013

**Figure B15.2: HIV expenditure from domestic sources, Asia and the Pacific, latest available year, 2009-2012**



Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on [www.aidsinfoonline.org](http://www.aidsinfoonline.org), India Global AIDS Response Progress Report 2012, and Kumar, U. A., 'Azad Launches Rs 14,295 Crore Phase IV of NACP', The New Indian Express, 13 February, 2014).

However, there is an urgent need to explore and implement innovative financing mechanisms, such as public/private partnerships, tax levies and pooled procurement, that could help in adopting "investment approaches" for achieving greater impact through prioritizing cost-effective and cost-efficient interventions. For example, in 2013, Thailand developed an investment case aimed at ending AIDS by 2030, based on detailed epidemic analysis and modelling. The investment needed to treat every HIV-positive person regardless of CD4 cell count, and to strengthen adherence support is relatively modest (an additional \$100 million over the next 10 years), but would prevent 20,000 people from acquiring HIV infections and avert 22,000 deaths. For every additional dollar spent now, the economic return will be three dollars in future savings on treatment and hospitalization costs.

Source: ESCAP.

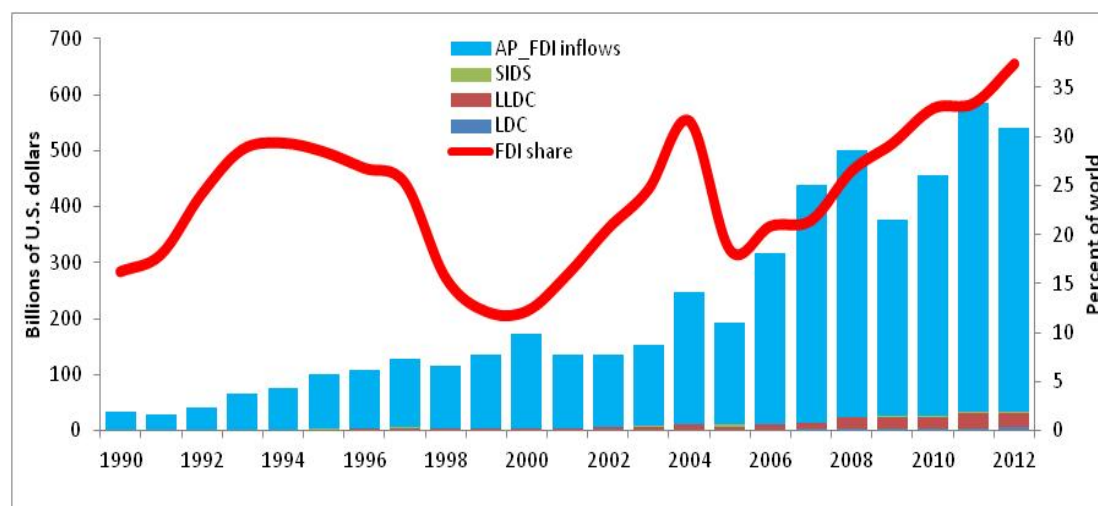
127. Policies need to be in place to raise not only ODA per se, but the overall aid policies should be discussed in the context of project aid versus budget support; conditional programme aid versus unconditional/untied budget support, and whether aid should be allocated to countries with “good governance”, especially in the context of aid management/coordination. Two recent global conferences underscored the importance of aid effectiveness: the Fourth High-Level Forum on Aid Effectiveness, in Busan, the Republic of Korea (2011),<sup>77</sup> and the first High-Level Meeting of the Global Partnership for Effective Development Cooperation, in Mexico City (2014), to anchor effective development cooperation in the global development agenda beyond 2015.<sup>78</sup>

## B. Foreign direct investment

128. FDI flows to the region are larger than those of ODA. Although FDI was also affected during the global financial crisis, dropping from \$469 billion to \$330 billion between 2008 and 2009, it recovered subsequently to \$506 billion in 2012.<sup>79</sup> In 2013, developing Asia-Pacific economies accounted for over one third of global FDI of \$1.46 trillion.<sup>80</sup>

129. Asia and the Pacific increased its share of global FDI inflows from 16.2% in 1990 to 37.5% in 2012, which was much higher than in Europe (21.4%), Latin America and the Caribbean (18.1%), North America (15.8%) and Africa (3.7%). However, these flows were highly skewed towards larger emerging countries and in resource sectors. FDI flows generally do not reach the countries that need them most: least developed countries and fragile States (see figure 10).

**Figure 10.** FDI inflows in Asia-Pacific economies, 1990-2012



Source: ESCAP statistics online. Available from [www.unescap.org/our-work/statistics](http://www.unescap.org/our-work/statistics).

<sup>77</sup> See the outcome document of the meeting High-Level Forum on Aid Effectiveness in Busan. Available from [http://effectivecooperation.org/files/OUTCOME\\_DOCUMENT\\_-\\_FINAL\\_EN2.pdf](http://effectivecooperation.org/files/OUTCOME_DOCUMENT_-_FINAL_EN2.pdf).

<sup>78</sup> See the Communiqué for the first High-Level Meeting of the Global Partnership. Available from <http://effectivecooperation.org/2014/03/30/draft-communique-for-the-first-high-level-meeting-of-the-global-partnership/>.

<sup>79</sup> ESCAP, *Statistical Yearbook for Asia and the Pacific* (Bangkok, 2011; 2013).

<sup>80</sup> See UNCTAD, *Global Investment Trends Monitor* (Geneva, 2014). Available from [http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/webdiaeia2014d1_en.pdf).

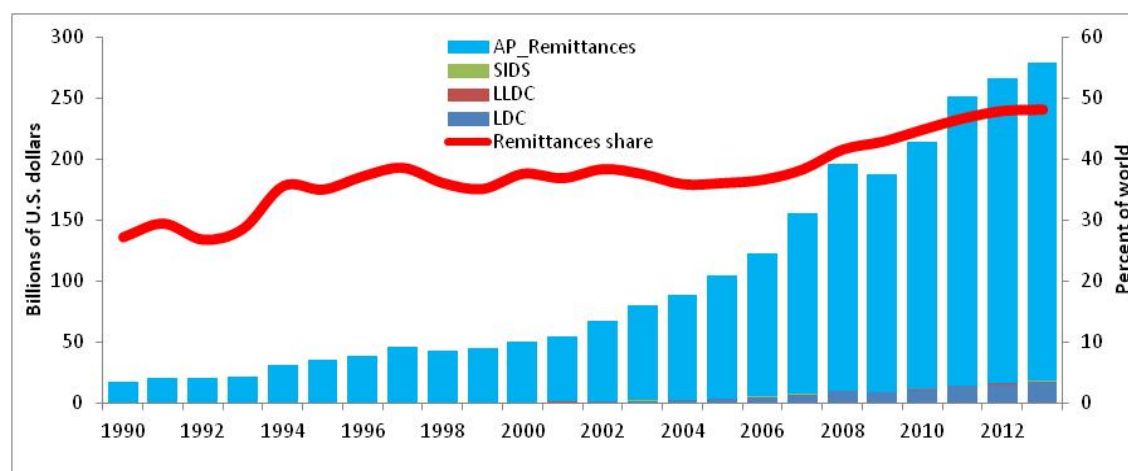
130. In this changing FDI scenario, Governments in countries of Asia and the Pacific regularly promote policies to ensure that FDI projects promote inclusive growth by investing more in Greenfield FDI, which can create employment and increase the technological capacity of national economic sectors. However, as FDI inflows are driven by market fundamentals and profit motives, there is usually too little investment in social and environmental projects as these sectors do not yield sufficiently high economic returns.

131. Despite the importance of FDI, unless proper regulatory measures are put in place to strengthen social and environmental pillars, the extent to which FDI can contribute to sustainable development is therefore likely to remain limited.

### C. Remittances

132. In contrast to inflows of ODA and FDI, remittances of workers employed overseas to the region did not decrease during the global financial crisis, but rather increased from \$114 billion in 2008 to \$117 billion in 2009. Migrant remittances to developing economies increased from \$200 billion in 2010 to \$260 billion in 2013 (see figure 11).<sup>81</sup>

**Figure 11.** Migrant remittances inflows in Asia-Pacific economies, 1990-2013



Source: ESCAP, based on data from the World Bank, Annual Remittances Data (updated as of April 2014). Available from <http://econ.worldbank.org/>.

Note: It measures workers' remittances, compensation of employees and migrant transfers and credit.

133. This amount is larger than total inflows of ODA to the region. For some economies, such as Kyrgyzstan, Nepal, Samoa, Tajikistan and Tonga, remittances represent more than 20% of GDP. Despite their importance, the potential for remittances to finance sustainable development is limited. A major use of remittances by recipient households is to fund consumption expenditures, including durable consumption, although they also occasionally fund investments in homes or improvements to family farms.

134. There is no doubt that remittances play an important role in supporting the incomes of the poor in recipient countries, but given the private nature of these flows, the possibilities of

<sup>81</sup> ESCAP, *Statistical Yearbook for Asia and the Pacific* (Bangkok, 2011; 2013).

utilizing them for the financing of public goods are limited.<sup>82</sup> However, besides the quantity of remittances, there are issues related to their overall cost to human lives. These are mostly linked to conditions of migrant workers' quality of life and labour rights and protection, as well as safe working and pay conditions.

### ***Key issues and challenges***

135. To increase the inflows of capital, policymakers could rethink the issues and challenges related to ODA, FDI and remittances. There is no doubt that ODA is important for least developed countries and other vulnerable economies. OECD-DAC members are thus expected to meet their commitments of providing an overall target of 0.7% of GNI for all developing countries and 0.15%-0.20% of GNI as ODA to the least developed countries.<sup>83</sup> This is essential to meet the existing financing gaps. Some critical policy issues to be explored are the following:

- Countries must be united to focus on effectiveness and allocation mechanisms for increasing ODA support, especially for least developed countries and fragile States.<sup>84</sup> Given that sectoral patterns are critical for development, policymakers could think of new forms of ODA and how they can be aligned more with countries' developmental requirements. In addition, countries could strengthen the institutional structure of aid effectiveness and delivery to produce long-term national sustainable development objectives. Furthermore, the region's share in global ODA is significantly lower than its share of the world's poor, a fact that deserves more attention in global fora.
- FDI flows to developing economies and least developed countries are critical in greenfield projects to further increase growth-enhancing activities. FDI policies should be articulated to advance the sustainable development agenda in the region. Also, there should be a role for performance requirements to ensure that multinational corporations contribute to sustainable development.
- Remittances provide a financial cushion to many households and economies in the region. Governments should facilitate transactions by reducing the costs of sending money and providing mechanisms that would enable them to tap these resources through, for instance, diaspora bonds or other remittance-backed bonds.<sup>85</sup>

<sup>82</sup> An interesting scheme to encourage investments in public goods using remittances income is Mexico's 3x1 programme, by which the municipal, state and federal governments matched funds sent to Mexico by migrant organizations abroad to fund the provision of public and social infrastructure in the migrants' communities of origin. See e.g. Rodolfo Garcia Zamora, Xóchitl Bada and Luis Escala-Rabadán, "Mexican migrant social and civic participation in the U.S.: the case of hometown associations in Los Angeles and Chicago", Mexican Migrant Social and Civic Participation in the United States, Washington D.C., 4-5 November 2005.

<sup>83</sup> See United Nations Integrated Implementation Framework. Available from <http://iif.un.org/content/official-development-assistance>

<sup>84</sup> See *Report of the Fourth United Nations Conference on the Least Developed Countries, Istanbul, Turkey, 9-13 May 2011* (United Nations publication, Sales No. 11.II.A.1).

<sup>85</sup> See the World Bank, *Financing for Development Post-2015* (Washington, D.C., 2013). Available from [www.worldbank.org/](http://www.worldbank.org/).

## X. Trade finance for small and medium size enterprises

136. Small and Medium-sized Enterprises (SMEs) account for 80-90% of the Asia-Pacific businesses but are less likely to export than larger enterprises.<sup>86</sup> SMEs in the region have limited access to trade finance, making it difficult for them to engage in international trade or to participate in international supply chains. Several factors are often identified as the major barriers preventing SMEs from accessing trade finance: high transaction costs, imperfect information, high default risk and limited collateral.<sup>87</sup>

137. Trade finance is the lifeline of trade because more than 90% of trade transactions in the world involve some form of credit, insurance or guarantee.<sup>88</sup> Because both buyers and sellers face credit risks, both parties can have various needs for financing related to inventory, production, and shipping. However, a recent survey conducted by the Asian Development Bank revealed a gap in trade finance of unmet demand for lending and guarantees to support \$1.6 trillion in trade globally, \$425 billion of which is in developing Asia-Pacific.<sup>89</sup> Estimates are that an increase of 5% in the availability of trade finance could result in an increase of 2% in production and employment.<sup>90</sup>

138. Many developing countries in the region have limited capacity to address trade finance shortages on their own as they lack the required national trade finance institutions and infrastructure. Government-backed export credit insurance and guarantee institutions and/or export-import (EXIM) banks are still inefficient or missing in many developing countries of the region. Similarly, credit rating institutions are also weak or absent in some developing countries in the region.

139. Credit information in almost all developing countries in the region has improved significantly between 2009 and 2014.<sup>91</sup> The most noticeable countries in this respect include Bhutan, Cambodia, Tajikistan, Mongolia, Lao People's Democratic Republic and Papua New Guinea. Interestingly, most of these countries are either landlocked developing countries or least developed countries. Reliable information on importers' or exporters' creditworthiness is indeed essential for trade finance providers to accurately assess the risk associated with a given transaction and offer affordable trade finance products.

140. In the long term, as the bulk of trade finance is provided by commercial banks operating in the domestic market – often as part of short-term, multipurpose loans (non-trade specific working capital) – a strong, credible and well-developed banking and insurance sector is the

<sup>86</sup> Estimates by IFC suggest that only 15% of regional SMEs are already exporters. See International Finance Corporation, *Scaling-Up SME Access to Financial Services in the Developing World* (Washington D.C. 2010). Available from [www.gpfi.org/sites/default/files/documents/G20\\_Stocktaking\\_Report\\_0.pdf](http://www.gpfi.org/sites/default/files/documents/G20_Stocktaking_Report_0.pdf)

<sup>87</sup> International Trade Centre, *How to Access Trade Finance: A guide for Exporting SMEs* (Geneva, 2009). Available from [www.intracen.org/uploadedFiles/intracenorg/Content/Trade\\_Support\\_Institutions/Delivering\\_services\\_to\\_exporters/Evaluating\\_trade\\_credit\\_applications/How\\_to\\_Access\\_Trade\\_Finance.pdf](http://www.intracen.org/uploadedFiles/intracenorg/Content/Trade_Support_Institutions/Delivering_services_to_exporters/Evaluating_trade_credit_applications/How_to_Access_Trade_Finance.pdf).

<sup>88</sup> *Ibid.*

<sup>89</sup> “Developing Asia” refers to the 45 developing member countries of the Asian Development Bank.

<sup>90</sup> Asian Development Bank, “Trade finance survey: major findings”, ADB Briefs, No. 11 (March 2013). Available from [www.adb.org/sites/default/files/pub/2013/trade-finance-survey-major-findings.pdf](http://www.adb.org/sites/default/files/pub/2013/trade-finance-survey-major-findings.pdf).

<sup>91</sup> See the World Bank's Doing Business database. The credit information index measures the scope, accessibility and quality of credit information through either public or private bureaus in a country. The index ranges from 0 to 6, with a higher value indicating that more credit information is available to facilitate lending decisions. Available from [www.doingbusiness.org](http://www.doingbusiness.org).



key to ensuring access to a full array of trade finance instruments. Good and stable prudential regulations and a pragmatic approach to financial sector liberalization will be essential in achieving this goal.

141. Technological innovation can also reduce the costs of trade financing and increase availability. For instance, electronic trade finance (ETF) offers an integrated and paperless process that reduces costs and enhances efficiency, from purchase to delivery. ETF provides all participants with the same data, including purchase orders and invoices, thereby enhancing transparency and information flows. This makes assessments of credit worthiness easier – especially important for SMEs given their often limited records.

142. At the regional and global levels, many of the trade finance facilitation schemes launched by development banks have effectively helped SMEs and developing economies to get access to trade finance. In the Asia-Pacific region, ADB's Trade Finance Program (TFP) supports billions of dollars of trade throughout the region, which in turn helps create sustainable jobs and economic growth in Asia's developing countries.<sup>92</sup> In addition to traditional trade finance, broader financial and technical assistance to developing countries is needed so that they can fully benefit from trade. In this context, continued support and expansion of the global Aid for Trade initiative will be important. This initiative helps mobilize resources to address the trade-related constraints identified by developing and least-developed countries. In 2012, Aid for Trade commitments reached \$41.5 billion: up 20% since 2011 and up 110% since 2002-05 baseline. Of this 57% was for economic infrastructure and 40% went to building productive capacity; but support for trade policy and regulations have stagnated.<sup>93</sup>

143. While Africa is now the region with the highest share of Aid for Trade commitments, the Asia-Pacific region is in second place. Indeed, in terms of individual countries, India, Turkey and Viet Nam were the largest recipients of commitments in 2012 with \$4.0, \$3.3 and \$2.6 billion respectively. The largest increases in aid for trade commitments were in middle income countries which in 2012 received \$31 billion (58% of the total and 38% higher than in 2011). In contrast commitments to least developed countries fell 2% from 2011 and account for only 24% of the total raising concerns that they are at risk of being left behind.

144. This situation calls for urgent attention to trade finance and the development of innovative trade financing mechanisms, including supply chain and non-bank financing, as well as better ways to assess risks in developing country markets. A key underlying issue in that regard is the lack of data and information on trade finance, which makes it more difficult to devise effective policy and regulations in that area. In this regard, the Asia-Pacific Trade Facilitation Forum 2013, organized by ESCAP and ADB in Beijing, China in 2013 considered the establishment of an Asia-Pacific Export Credit Agency or Asia-Pacific Trade Finance Fund.

145. The importance of the private sector is increasingly recognized as a stakeholder and as a partner in the delivery of Aid for Trade, and, in some cases, as a provider of capacity-

<sup>92</sup> More information is available from [www.adb.org/TFP](http://www.adb.org/TFP).

<sup>93</sup> Organization for Economic Cooperation and Development (OECD), "Aid for trade in 2012: increasing volumes, hardening terms", presentation presented at the CTD Session on Aid for Trade, WTO, 9 April 2014. Available from [www.wto.org/english/news\\_e/news14\\_e/OECD.pdf](http://www.wto.org/english/news_e/news14_e/OECD.pdf).



building support. Public-Private Partnerships, however, remain challenging in terms of roles and expectations.

### ***Key issues and challenges***

146. The Asia-Pacific region needs policies that enable services to become more flexible and tailored to the requirements of poor and vulnerable communities as well as for the trade finance for SMEs. The policy discussions may include the following:

- *Government active participation:* A Government-wide approach can be effective to create a financial system where financially excluded people get access to finance. Also, central banks may set up their own goals and specific programmes for increasing financial inclusion. The Asia-Pacific region needs to create an enabling environment to enable SMEs and developing countries to have better access to trade finance and to support the development of capacity to identify and overcome wider constraints to trade.
- *Inclusive trade finance system for SMEs:* Appropriate institutional frameworks and regulations to develop trade finance for SMEs. It requires models of export credit insurance and guarantee organizations are most appropriate for developing countries of the region. And, to undertake measures build capacity of SMEs in relation to trade finance. Furthermore, there is an opportunity to learn from successful lessons of microfinance to devise similar microtrade finance programs.
- *Inclusive trade finance system for developing countries:* many developing countries in the region have limited access to trade finance. Regional trade finance cooperation mechanisms would be most effective in improving trade finance capacity in many countries of the region. Further, there is also need to establish and develop credit rating institutions that monitoring the process. In a ways that mechanism should be put in place to promote collaboration of development partners (including, among others, United Nations agencies and international financing institutions) to work with developing countries to develop trade finance.
- *Trade finance related resources must be mobilized to support the capacity of developing countries to tackle constraints on trade, including through Aid for Trade.* The policies are needed for Aid for Trade to be more effective, and that would help support raise resources to support Aid for Trade.

## **XI. South-South and triangular development cooperation**

147. The growing diversity of the developing world has created new opportunities for South-South cooperation (SSC) and triangular development cooperation (TDC). Within the Asia-Pacific region, economic linkages among countries have significantly strengthened partnership, development cooperation in areas such as trade, investment, finance, technology and capacity-building.

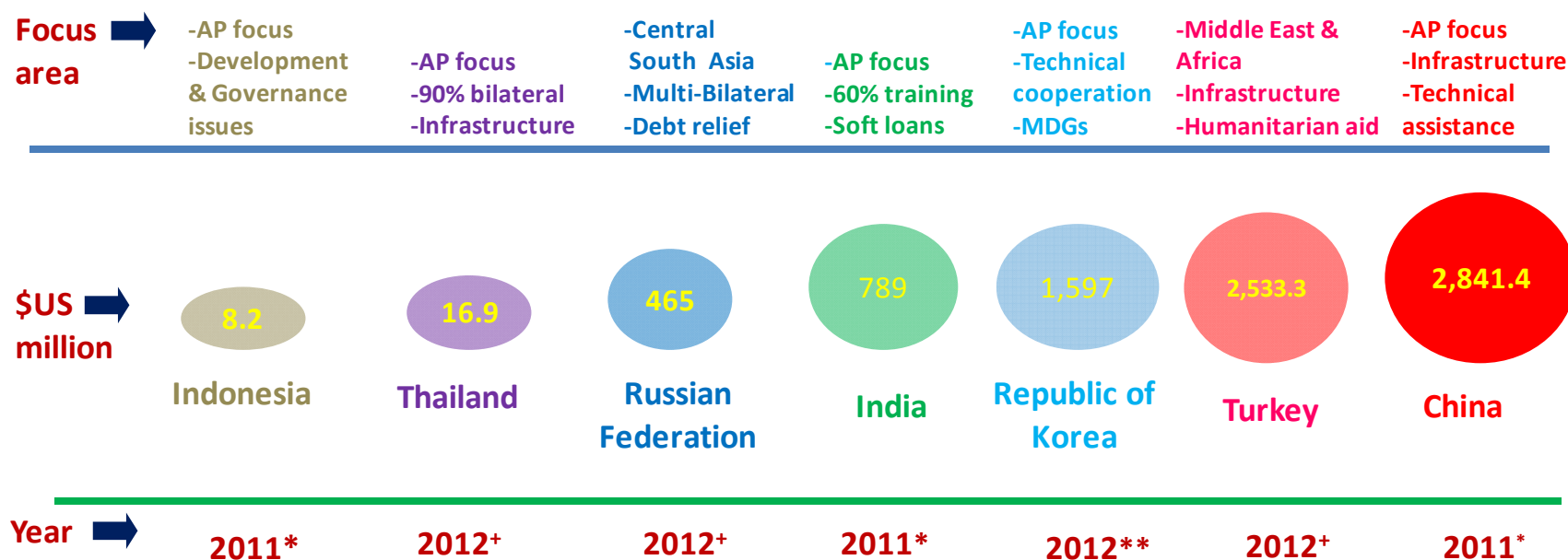
148. SSC has provided new opportunities to share best practices, skills and expertise between developing countries in the region. Such skills and capabilities are often more appropriate to recipient countries than those available from developed countries due to shared development challenges and economic structures with the donors, such as labour-intensive production, infrastructure bottlenecks, geography, market size and cost structures. For the same reasons, TDC can achieve greater effectiveness per unit of resources spent compared with traditional North-South development partnerships.

149. Developing countries of the region have undertaken SSC activities over the past decades with varying degrees of engagement and size. The two largest contributors to SSC activities in the region, China and Turkey, spend over \$2.8 billion and \$2.5 billion respectively, on SSC related activities in recent years (see figure 12). Other important contributors to SSC activities in the region include the Republic of Korea, India, the Russian Federation, Thailand and Indonesia.

150. The potential for relying more on SSC and TDC in Asia and the Pacific has increased due to the fast growth and dynamism of emerging countries such as China, India, Indonesia, Japan, the Republic of Korea, Singapore and Thailand. The majority of SSC activities in the region are related to projects, capacity-building and sharing development experiences. Some important areas for cooperation have been trade, investment and technology transfer, especially for least developed countries. Other key areas include poverty alleviation, gender, agriculture and rural development, food security, infrastructure projects, ICT, environment, disaster relief and reconstruction, debt relief, banking, training of civil servants, governance, capacity-building and advisory services, and humanitarian aid (see box 16).

151. Most countries have created a dedicated agency within one of their ministries to deal with SSC and TDC. Some examples, include in China (the Ministry of Commerce), India (the Ministry of External Affairs administers the Indian Technical and Economic Cooperation Programme), the Republic of Korea (the Overseas International Cooperation Agency KOICA), Indonesia (Ministry of National Development), and Thailand (International Cooperation Agency TICA).

152. With the emergence of major developing countries in the region, there has been a growing interest in strengthening regional cooperation and integration, for which SSC and TDC can play a very important role. It is expected that SSC and TDC activities will continue to increase in the region in view of the continued interest of developing countries in the region to partner and cooperate with each other in all three dimensions of sustainable development (see box 17). There is great potential for SSC and TDC to play an important role for the financing of sustainable development.

**Figure 12.** South-South cooperation activity of selected Asia-Pacific economies

Sources: \* Thailand, Russian Federation and Turkey, based on data from OECD non-DAC providers of concessional development co-operation (net disbursement in current prices). Available from [www.oecd.org/dac/stats/non-dac-reporting.htm](http://www.oecd.org/dac/stats/non-dac-reporting.htm); \*China, India and Indonesia, based on data from OECD estimates of gross concessional flows for development co-operation ("ODA-like" flows) from OECD Key Partners. Available from [www.oecd.org/dac/stats/non-dac-reporting.htm](http://www.oecd.org/dac/stats/non-dac-reporting.htm); \*\* Republic of Korea, based on data from OECD DAC Members' Net Official Development Assistance in 2012.

Available from [www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm](http://www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm).

### Box 16: South-South Cooperation in transfer of technologies

The Indian Government backed "Lighting a Billion Lives Initiative" (LaBL) aims at providing high quality, cost-effective solar lanterns in off-grid villages. The project sets up a solar charging station in beneficiary villages, trains a local entrepreneur to charge and rent the lamps for a daily fee to villagers. The project's capital cost is covered by the Government and other benefactors through grants, while its sustainability is ensured by the rent paid daily by the villagers for the lanterns. The initiative has formed a basis for South-South collaboration through capacity-building programmes, technology transfer initiatives and piloting of successful delivery models for replicating and scaling up the model in other developing countries. Internationally, LaBL has effectively overseen the distribution of over 19,000 solar lanterns to rural communities across Africa and Asia.<sup>a</sup>

Dongbao, a Chinese pharmaceutical firm and VACSERA, an Egyptian firm specialized in biological products recently entered in a cooperation that saw the successful transfer of technologies to Egypt to produce recombinant insulin used to treat diabetes. This product was previously mostly imported and was often in short supply in Egypt. The cooperation resulted in a local production of insulin in Egypt at cheaper cost than the previously imported products.<sup>b</sup>

<sup>a</sup> See UNCTAD, *Technology and Innovation Report 2012* (Geneva, 2012). Available from [http://unctad.org/en/PublicationsLibrary/tir2012\\_en.pdf](http://unctad.org/en/PublicationsLibrary/tir2012_en.pdf). For further information, see The Energy and Resources Institute (TERI), *Annual Report 2012-2013* (New Delhi, 2013). Available from [www.teriin.org/index.php?option=com\\_content&task=view&id=19](http://www.teriin.org/index.php?option=com_content&task=view&id=19).

<sup>b</sup> See UNCTAD, *Technology and Innovation Report 2012* (Geneva, 2012). Available from [http://unctad.org/en/PublicationsLibrary/tir2012\\_en.pdf](http://unctad.org/en/PublicationsLibrary/tir2012_en.pdf).

Source: ESCAP.

### Box 17: Example of Triangular Cooperation: Nationally appropriate mitigation actions (NAMAs)

Recently, there has been growing interest in nationally appropriate mitigation actions (NAMAs) as a tool for developing countries to promote climate change mitigation actions in the context of national sustainable development strategies. NAMAs were first proposed at the Thirteenth Conference of the Parties (COP-13) of the United Nations Framework Convention on Climate Change (UNFCCC) in Bali in 2007, and are essentially greenhouse gas (GHG) emission mitigation measures that developing countries choose to voluntarily undertake in accordance with their respective capacities and socio-economic realities. There are principally two ways of financing a NAMA: unilateral or supported NAMAs. Unilateral NAMAs are financed exclusively through domestic resources, while supported NAMAs are to be financed partly through international funding. If associated with a crediting mechanism, supported NAMAs may take the form of "credited NAMAs", although no consensus has been reached yet on the modalities and modus operandi of credited NAMAs. The expectations are, however, for NAMAs to play a key role in channelling international support in terms of financing, technology transfer and capacity-building. A growing number of multilateral and bilateral financing mechanisms are being made available in support of NAMAs.

A specific NAMA Facility has been set-up by the German and British Governments and the Green Climate Fund and the Global Environmental Facility are expected to play a key role in the financing of NAMAs. Multilateral development banks have traditionally been at the forefront of innovative climate financing mechanisms and should also play an important role.

In order to facilitate the mobilization of international support for NAMAs, the UNFCCC has recently set up the NAMA Registry, a web-based platform where developing countries can voluntarily record NAMAs seeking international support with the objective to enable the matching of finance, technology and capacity-building support with these actions. To respond to the growing interest in NAMAs in the Asia-Pacific region, the ESCAP secretariat has been promoting regional knowledge sharing on NAMAs on waste, one of the priority sectors for sustainable urban development in the region. In the context of a regional programme, ESCAP is also currently providing support to Pakistan and Viet Nam for the development of NAMAs in the waste sector.

Source: ESCAP.

### *Key issues and challenges*

153. To expand the scope and magnitude of SSC and TDC financing strategies, Asia-Pacific countries may need to explore some new areas. Policy issues may include the following:

- *Food security:* SSC and TDC can play a role in boosting investment and sharing experiences on agricultural research and development and plant varieties that are tailored for small and marginal farmers. SSC activities should further be enhanced to cover education and training, joint research and development, exchange of experiences and technologies, cooperation in biodiversity conservation, protection and evolution of biosafety norms.
- *Public Health:* Cooperation can be in the form of developing drugs and vaccines against such as malaria and tuberculosis diseases. Additional funding resource could be directed to research and development conducted in developing countries to build capacities and strengthen research and development cooperation in the region.
- *ICT connectivity:* Recently, several subregional institutions such as ASEAN, SAARC and ECO have instituted cooperation mechanisms for improving ICT connectivity. Other developing countries in the region should take advantage of SSC to share knowledge and resources. Countries could maximize the use of existing investment and cooperation frameworks.
- *Climate change:* The Asia-Pacific region has been seriously impacted by the consequences of climate change. Countries can further engage in SSC for disaster risk reduction through sharing knowledge, information and good practices, and for sharing the modalities for developing common frameworks of action in the region. The cooperation must pool resources for activities such as satellites and space information and products.<sup>94</sup>
- *Regional (and global) public good:* Proactive SSC and TDC are critical to helping share regional public goods, such as creating space for countries increase their voice and concern in regional as well as global financial institutions such as IMF, WTO and G20, especially for the countries with special needs. Regional and global development finance institutions increase the availability of funding to increase regional public goods.

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<sup>94</sup> ESCAP, *Building Resilience to Natural Disasters and Major Economic Crises* (Bangkok, 2013). Available from [www.unescap.org/commission/69/theme-study](http://www.unescap.org/commission/69/theme-study).

### XII. Conclusions

154. This work-in-progress paper attempts to provide an overview of the landscape and state of play of Asia-Pacific development finance. The region has large financing requirements, but there is also scope for identifying and tapping the regional resource potential. The estimates of regional financing requirements vary depending on the source used. At best, most estimates remain tentative. Financing requirements to strengthen social development are up to \$800 billion per year, infrastructure up to \$900 billion per year, and investments to modernize the region's energy sector, including adaptation of new technologies and renewable forms of energy, could cost as much as \$800 billion per year.

155. These annual estimates represent, however, less than 8% of the assets of the region's mass affluent and high-net-worth individuals in 2012. In addition, the region's foreign exchange reserves amounted to \$7.3 trillion in 2012, and its gross national savings were \$8.4 trillion, equivalent to 51% to the world gross national savings in 2012. Therefore, the Asia-Pacific region has enough savings to finance its sustainable development. The real challenge, however, is how to mobilize these savings.

156. Going forward, the region should work collectively to ensure that it nurtures strong and stable financial systems. To achieve this, policymakers and regulators need to work with the private sector to develop more diversified and balanced financial sectors—which are key to reinforcing financial stability and sustainability, as well as to extending finance to meet the people's needs and the region's development. This calls for:

- raising tax-to-GDP ratios by broadening tax bases, removing exemptions – be they for individuals, corporations or indirect taxes – and improving collection and administrative efficiency;
- reorienting public spending by, *inter alia*, curbing regressive subsidies – in particular energy-related – and using the saved funds to create socially and financially sustainable social protection systems;
- moving from bank-dominated to well-diversified and competitive financial systems, which can be achieved by broadening and deepening equity and debt markets, fostering the development of the institutional investment sector to impart the required liquidity, and strengthening regulatory frameworks to restore investor confidence;
- strengthening legal, regulatory and supervisory systems that promote financial inclusion to intermediate finance to low-income groups, women and micro-entrepreneurs;
- advocating and positioning PPPs, leveraged through well-designed incentive frameworks, to encourage financial systems and institutions to finance sustainable development projects; and
- furthering the development of regional capital markets, which have the greatest potential for raising the required resources for financing sustainable development.

157. Recent trends show a rapid growth of local currency bond markets in the region's major developing countries, with the amount outstanding more than trebling in eight years, to \$7.4 trillion by September 2013. A critical issue which remains to be addressed is how to enhance country capacities to set up and improve the functioning of capital markets institutions and regulatory frameworks, particularly in smaller and least developed countries and in the small island developing States.

158. Besides developing institutions and regulatory frameworks to strengthen the region's capital markets, it is important to foster the development of domestic institutional investors, particularly in the asset management and pension fund industries. While developing countries hold 43% of the total assets managed by the world's sovereign wealth funds, their representation in the assets managed by the largest pension funds and asset management firms is very low, at less than 8.5% and 1.4% respectively. There is large expertise and potential in the region to develop the asset management and pension industries, given the growing number of high-net-worth and mass affluent individuals in the region.

159. In parallel, renewed efforts need to be employed to exploit domestic sources of financing and to ensure that official development assistance commitments and distributions are met. The private sector must also be catalysed and incentivized to support sustainable development. To effectively deploy available financing for sustainable development, measures need to be taken to (i) improve public sector policy support for risk- or cost-sharing mechanisms to facilitate access to finance for PPP projects; (ii) identify and leverage new and innovative climate financing mechanisms; (iii) tailor financial services more closely to the requirements of the poor and SMEs; and (iv) promote South-South and triangular development cooperation to share knowledge more widely and increase the availability of funding for capacity building.

160. ESCAP is positioning itself to continue facilitating intergovernmental debates on financing for development involving the private sector and other stakeholders, and to examine approaches and options for enhancing South-South and triangular cooperative frameworks. However, these forms of cooperation will supplement – not substitute for – North-South flows.