

**Economic and Social Council**Distr.: General  
19 September 2011

Original: English

---

**Economic and Social Commission for Asia and the Pacific**  
Committee on Environment and Development**Second session**

Bangkok, 22-24 February 2012

Item 6 (a) of the provisional agenda

**Trends and progress in the field of environment and development: Emerging and persistent issues in environmental sustainability****Emerging and persistent issues in environmental sustainability****Note by the secretariat***Summary*

Countries in the Asian and Pacific region continue to face conflicts between the supply and demand of dwindling environmental and natural resources because of planned and implemented economic growth trajectories. The environmental sustainability of these countries is also inter-linked with the patterns of consumption and production of fuels and energy, and with persistent and recurrent socio-economic challenges, such as poverty reduction, food security, health care and welfare, access to services, equitable mobility, and disaster vulnerability. As a result, a number of policies and practices are emerging at the national level to address these challenges in an integrated and inclusive manner.

Presenting an overview of the latest analyses of these broad implications, and of emerging trends in national policies and practices, including the application of green growth approaches, the present document provides the basis for member States to exchange relevant information and national experiences and outlines possible directions for future regional cooperation in promoting synergy between environmental sustainability, economic development and poverty reduction activities.

The Committee may wish to review the present document and provide the secretariat with guidance regarding the issues raised.

## Contents

	<i>Page</i>
I. Introduction.....	2
II. Trend in environmental sustainability.....	3
III. Trend in policy responses .....	6
A. Development strategy .....	6
B. Pollution and wastes .....	7
C. Energy and climate change .....	9
D. Forest and agriculture .....	10
E. Assessment.....	11
IV. A way forward .....	12
V. Issues for consideration.....	14
 Figures	
1. FAO food price index and Brent crude oil price, January 2004 to January 2011 .....	3
2. Vicious cycle of poverty and energy.....	4
3. Cycle of poverty and environmental degradation in developing countries.....	5

## I. Introduction

1. While Asian and Pacific countries continue to face the challenges of environmental sustainability, there is a growing recognition of the socio-economic challenges that accompany such sustainability. These challenges include poverty reduction, food security, health and welfare, access to services, equitable mobility, consumption and production patterns and disaster risk reduction. A number of policies and practices are emerging from national efforts to address these challenges in an integrated and inclusive manner.

2. The Sixth Ministerial Conference on Environment and Development in Asia and the Pacific, held in Astana from 27 September to 2 October 2010, adopted a Ministerial Declaration intended, among other things, to create the socio-economic environment needed to foster and promote a sustainable development path. To that end, the Conference adopted the Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2011-2015, which identified “Harmonizing rapid economic growth, employment generation and environmental sustainability” as a priority programme area. This will enable the ESCAP secretariat to further assist member countries in the implementation of the programme (see E/ESCAP/67/8).

3. The present document gives an overview of the implications of the environmental and socio-economic interaction and of the emerging trend in enabling socio-economic policies and practices adopted at the national level, including the above-mentioned green growth approach. The document thus provides the basis not only for exchanging relevant information and national experiences, but also for defining the future direction of regional cooperation.

## II. Trend in environmental sustainability

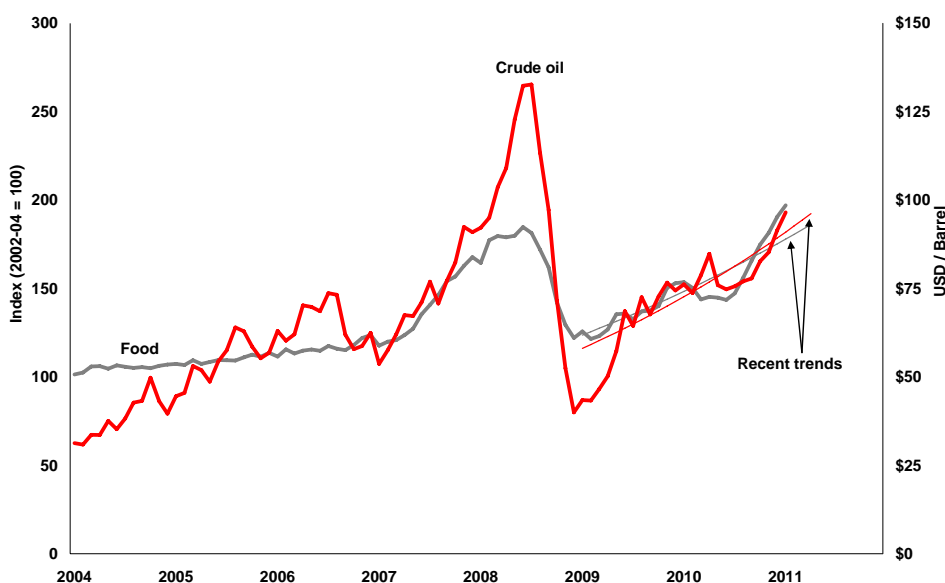
4. The Sixth Ministerial Conference on Environment and Development in Asia and the Pacific reiterated the concern over resource depletion and deteriorating environmental sustainability. The Ministerial Declaration adopted by the Conference particularly highlighted the fact that unsustainable consumption and production patterns increase pressure on carrying capacity, which, in turn, degrades the quality of life by: (a) increasing the ecological footprint due to sectoral growth in transport, waste and chemical use; and (b) threatening air, water, land and biodiversity in ecosystems. The Declaration also highlighted the increasing risk of climate change due to higher temperatures and the frequency and intensity of extreme weather events.

5. It also recognized additional burdens from dwindling water and food resources, and from climate change-induced natural disasters for the vulnerable and least developed countries of Asia and the Pacific.

6. The trend has continued over the past year. While steadily recovering from the financial crisis, with most economies in the region proving to be relatively resilient to the financial instability, high food prices, and energy and commodity price volatility plaguing the rest of the globe, persistent inequalities, intensifying natural disasters, and climate and environmental change still overshadow the regional outlook. In addition, there is a growing concern over the region's ever globalizing economy vis-à-vis resource constraints.

7. Figure 1 shows the correlation between the FAO food price index and the Brent crude oil price for the seven-year period from January 2004 to January 2011. Rising food and energy prices, in particular, are having dire effects on the poor and reversing hard-won development gains. ESCAP estimates that up to 42 million additional people across Asia and the Pacific will slide back into poverty in 2011 in addition to the 19 million already affected in 2010. In the worst-case scenario, achieving the Millennium Development Goals, for many least developed countries, would be postponed by up to a half a decade.

Figure 1  
FAO food price index and Brent crude oil price, January 2004 to January 2011

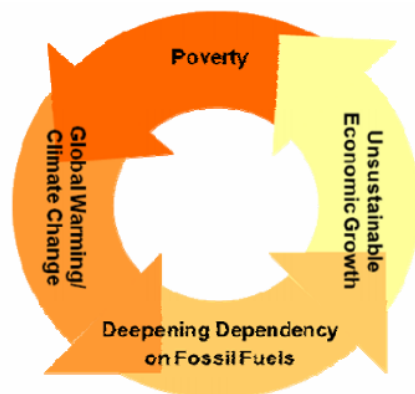


8. While food security is becoming a major challenge for the sustainable development of the region, approximately one third of the food produced in the world is lost or wasted during the production, distribution and consumption phases. The disposal of food wastes also causes serious environmental problems to which the poor are especially vulnerable. These problems include malodors, the contamination of surface and ground water and air pollution caused by incineration. These, in turn, can create social problems as well, such as health risks for the poor through the scavenging of food waste.

9. Environmental and socio-economic interactions are also significant in the energy sector. Lack of access to modern and clean energy inhibits key aspects of human welfare and development. Despite advances in electricity grid coverage, four out of five people live in rural areas of South Asia. In South-East Asia, a vast majority of the poor, living on less than \$1 per day, continue to rely on traditional biomass, wood, agricultural residues and dung, for cooking and heating. In extreme cases, urban poor have been known to use a pile of rubbish plastic bags and papers for cooking, causing serious indoor air pollution and increasing the risk of respiratory disease. Increased poverty, on the other hand, will intensify the dependence on traditional biomass in a quest for cheap fuels. The concept of a vicious cycle was presented in the 2008 theme study *Energy Security and Sustainable Development in Asia and the Pacific*<sup>1</sup> (see figure 2).

Figure 2

**Vicious cycle of poverty and energy**



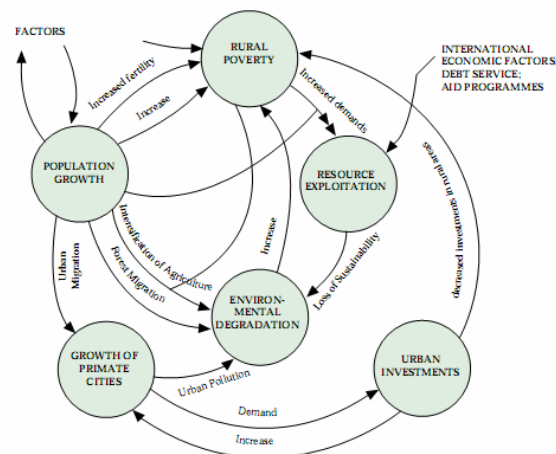
Source: *Energy Security and Sustainable Development in Asia and the Pacific* (United Nations publication, Sales No. E.08.II.F.13).

10. *The State of the Environment in Asia and the Pacific 2000* report highlighted a cycle of poverty and environmental pollution/degradation in developing countries (see figure 3). The interaction set off a downward spiral of ecological deterioration that threatens the physical security, the economic well-being and the health of many of the region's poorest people.<sup>2</sup>

<sup>1</sup> United Nations publication, Sales No. E.08.II.F.13.

<sup>2</sup> United Nations. *State of the Environment in Asia and the Pacific 2000*.

Figure 3  
Cycle of poverty and environmental degradation in developing countries



11. In other sectors, the degradation of ecosystems has forged a particularly dynamic and complex cycle involving poverty. While people receive substantial benefits from ecosystems for provisioning services (energy, water, food, timber and fibre for both urban and rural households), cultural services (sense of place or tourism) and regulating services (mitigation of floods, storm surges and climate moderation), overexploiting and modifying provisioning services can raise livelihood vulnerability and reduce the supply of ecosystem-regulating services, such as erosion control and landslide regulation. Such overexploitation may be conducted for short-term economic benefits to alleviate poverty, but often results in the irreversible loss of long-term benefits, thus exacerbating poverty. Deforestation and land use changes may be associated with scaled encroachment and displacement of remote communities, which also create a serious risk of loss of livelihood and increased poverty.

12. In many economies, the largest share of economic output and employment belongs to agriculture, as many people work in subsistence agriculture, relying primarily on meagre assets, agricultural land, small-scale livestock raising and cash crops, and common natural resources such as fish and non-timber forest products. For this reason, the greatest impact of disasters on livelihoods is often felt through damage and losses in the agriculture sector – to houses, shelters and productive assets, including agricultural land, livestock, and rural and small-scale enterprises as well as loss of employment. The impact is also significant in health, education, psychosocial and gender aspects of both urban and rural societies.

13. For several years, concerns over climate change, together with shortfalls in energy supplies, encouraged agricultural production for fuel rather than food. This further limited the availability of land for food production. On the other hand, there is evidence of linkages between the potential impact of climate change and the frequency and severity of hydro-meteorological disasters, such as floods, drought, extreme temperatures, typhoons, hurricanes and wildfires. Such disasters not only cause immediate economic damage and loss of life, but they also have a deep and lasting impact on human development. Disaster losses are often linked with, or exacerbated by, poverty and vulnerabilities of the poor that stem from socio-economic and environmental imbalances. In turn, disasters may push people into, and hinder their ability to rise out of, poverty. This is partly due to the fact that people who are constantly exposed to such threats and income

shocks are more likely to stay poor and vulnerable, setting in motion yet another detrimental cycle that can be extremely difficult to break.<sup>3</sup>

14. Transport is one of the most fundamental infrastructures that ensure economic and social development. However, this very infrastructure currently consumes more than 50 per cent of the world's liquid fossil fuels, emits about a quarter of global energy-related carbon dioxide,<sup>4</sup> and is responsible for air pollution and associated health problems. At the same time, underdeveloped transport presents losses in productivity and competitiveness (for example, through congestion) in urban areas, and significantly impacts social risks, such as reductions in human security (for example, through accidents), connectivity, equitable mobility and universal accessibility. Insufficient provision of public transport, in particular in urban areas, exacerbates all these problems simultaneously.

15. The strong linkages between environmental, social and economic issues are increasingly highlighted by a number of reports on sustainable development in the Asia-Pacific region. The analysis of recent trends revalidates the call of the Sixth Ministerial Conference on Environment and Development in Asia and the Pacific for a shift in the development paradigm towards "inclusive and sustainable growth" patterns, and creates an enabling socio-economic environment to drive the changes needed to foster and promote a sustainable development path.

### **III. Trend in policy responses**

16. In order to respond to the emerging trend, the government and other stakeholders in the Asia-Pacific countries have been initiating policies and programmes that explicitly address environmental sustainability as well as economic and social development in an integrated manner.

17. Especially, taking into account the fact that compared to the rest of the world, Asia and the Pacific uses more than three times the resources to produce one unit of GDP, major policy interventions are required to foster improvement of resource efficiencies and to mitigate the risk of resource constraints together with their possible implications regarding the region's economic and social development. Examples of cases reflecting relevant policies and programmes are presented below.

#### **A. Development strategy**

18. The government of Japan has been promoting the 3Rs to create a sustainable society, one that has balance between economy and environment. Japan is shifting from a sole focus on the management of hazardous substances to new phases of greening the entire economy. The 3Rs also aim at promoting technological development, in particular the areas of resource efficiency, waste recovery and recycling, as well as the development of green new products, as one of the country's future growth and employment engines. There have been substantial investments towards the development of energy-efficient home appliances and office equipment, as well as recycling infrastructure.<sup>5</sup>

---

<sup>3</sup> ESCAP and ISDR (2010), *Protecting Development Gains, Asia Pacific Disaster Report 2010*.

<sup>4</sup> IEA (2005) CO<sub>2</sub> Emissions from Combustion 1971-2003. OECD/IEA.

<sup>5</sup> <http://www.env.go.jp/recycle/3r/en/index.html>  
<http://www.meti.go.jp/policy/recycle/main/English/index.htm>

19. China is implementing far-reaching policy measures to increase its resource-efficiency. Initiatives include the 2006 resource-saving society initiative, addressed by the Eleventh five-year plan (2006-2010). This policy direction was elaborated by the 2008 Circular Economy Promotion Law, which guides comprehensive efforts to direct and shape the economic development of China in ways that conserve energy, water and materials, and that protect the environment. The same plan strongly advocated economic development in harmony with environmental and resource sustainability, as well as social wellness for all, including those in the less-developed western part of the country. The move was reaffirmed in the Twelfth five-year plan (2011-2016).<sup>6</sup>

20. Indonesia launched a fiscal stimulus package of \$5.9 billion in February 2009, spanning environmental and resource sustainability, as well as economic and social development. The fund was spent for energy-saving investments, irrigation schemes to foster employment, infrastructure projects, empowerment programmes for people living in rural areas, road construction in villages and municipalities, and the prevention of worker layoffs and the improvement of Indonesian business competitiveness.<sup>7</sup>

## **B. Pollution and wastes**

21. The Government of the Republic of Korea has implemented a wide variety of policies to improve environmental and resource sustainability while enhancing food security. In the early 1990s, the Government started to explore alternative measures that allowed food wastes to be recycled for food production as either compost or animal feed. By 2004, 81.3 per cent of food waste was recycled as livestock feed and compost compared to 45.1 per cent in 2000. The Food Waste Comprehensive Plan was enacted nationwide in 2005, to change the food culture and facilitate food waste minimization and recycling.<sup>8</sup>

22. Bangladesh has enacted a number of laws, regulations, policies, and plans relating to waste management at both the national and local level. In 1995, Waste Concern, a national research organization, initiated a community-based decentralized composting project in Dhaka in an attempt to recover value from the organic portions of waste. Waste Concern set in motion a process for house-to-house collection of solid waste that is then taken to community-based composting plants and turned into organic fertilizer. In 1998, the Ministry of Environment and Forest selected Waste Concern as a sub-implementing agency for the project "Community Based Urban Solid Waste Management in 5 areas of Dhaka City" with support from UNDP. Waste Concern processed about 124,400 tons of organic waste, which resulted in 31,100 tons of compost and generated a profit margin of \$0.01 per kg. In turn, fertilizer companies generated significant profit margins by enriching and selling the compost. The use of organic fertilizers

<sup>6</sup> [http://www.chinacp.org.cn/eng/cppolicystrategy/circular\\_economy.html](http://www.chinacp.org.cn/eng/cppolicystrategy/circular_economy.html)  
<http://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/circularreport.pdf>

<sup>7</sup> ESCAP 2009 and World Bank, Crisis Talk, Emerging markets and the financial crisis, Indonesia's stimulus package, 18 March. 2009.  
<http://crisistalk.worldbank.org/2009/03/indonesias-stimulus-package.html>

<sup>8</sup> [http://www.un.org/esa/dsd/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/korea/WasteManagement.pdf](http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/korea/WasteManagement.pdf)  
<http://www.agnet.org/library/ac/2001b/>  
[http://eng.me.go.kr/content.do?method=moveContent&menuCode=res\\_cit\\_was\\_energy](http://eng.me.go.kr/content.do?method=moveContent&menuCode=res_cit_was_energy)

also benefited farmers by increasing per hectare yield by 30-50 per cent. The projects have generated 986 jobs among the urban poor, especially women, and 494,290 people benefit from a household waste disposal system across the country, and save municipal waste management costs.<sup>9</sup>

23. Waste Concern also enabled the reduction of greenhouse gas emissions by 17,000 tons between 2001 and 2006, and saved 33.12 acres of landfill area. In addition, a Clean Development Mechanism (CDM) project “Composting of Organic Waste in Dhaka”<sup>10</sup> started in 2006 for the collection and composting of 700 tons of organic waste per day, is expected to reduce GHG emissions by 89,259 tCO<sub>2</sub> during its seven-year crediting period. The Certified Emission Reduction (CER) from this project has created a new source of revenue for a composting initiative. The project, which produces 50,000 tons of compost per year, is expected to create 1,000 additional jobs. This approach is being replicated in several slums of Dhaka and other communities throughout the country.

24. In an effort to reduce waste generation and the demand for landfill space, the Environment Protection Department (EDP) of Hong Kong, China, developed the Policy Framework for the Management of Municipal Solid Waste (2005-2014),<sup>11</sup> which lays out a plan for waste reduction and recovery in Hong Kong, China, by, among other things, setting a waste recovery target of 50 per cent by 2014. In line with this framework, Hong Kong, China, has developed an EcoPark, which is an industrial park dedicated to recycling. Providing a space for the development of the recycling industry, it facilitates the creation of a circular economy through the promotion of the reuse, recovery and recycling of waste, which will be processed locally. This scheme mitigates waste-related problems, helps spur the local economy and facilitate the creation of green jobs. In early 2011, an EcoPark job fair was organized where more than 120 jobs were offered by the recycling industry.<sup>12</sup>

25. Many countries in the region are aware of these challenges and are taking steps to promote sustainable transport. China, for example, has been actively promoting sustainable transport through a number of measures, including heavy investments in public transport. The City of Guangzhou, for example, launched its Bus Rapid Transit (BRT) system in 2010. It currently carries 26,900 passengers per direction per hour with a daily ridership level of roughly 800,000. The scheme is the first in China to include bicycle parking at the stations and to include direct tunnels between metro and BRT stations. To further support the uptake of non-motorized transport, new bicycle lanes were developed running parallel to the BRT stations as well as a bike sharing scheme launched in June 2010 with an initial interest of 1,000 bike riders (ITDP). India’s Jawaharlal Nehru National Urban Renewal Mission (JNNURM) aims to support the development of sustainable infrastructure as part of a wider process of urban renewal. Cities identified by the Mission are expected to formulate comprehensive city development plans (CDPs) for a period of 20-25 years outlining the cities overall strategy, specific programmes and policies and financial plans. Based on the CDPs,

<sup>9</sup> [http://www.uncrd.or.jp/env/3r\\_02/presentations/BG2/RT2\\_01\\_Bangladesh.pdf](http://www.uncrd.or.jp/env/3r_02/presentations/BG2/RT2_01_Bangladesh.pdf)  
[http://www.env.go.jp/recycle/3r/en/asia/02\\_03-3/06.pdf](http://www.env.go.jp/recycle/3r/en/asia/02_03-3/06.pdf)  
[http://www.wasteconcern.org/Publication/SAARC per cent20Country per cent20Paper\\_Bangladesh.pdf](http://www.wasteconcern.org/Publication/SAARC%20per%20Country%20per%20Paper_Bangladesh.pdf)

<sup>10</sup> <http://cdm.unfccc.int/Projects/DB/SGS-UKL1134142761.05/view>

<sup>11</sup> <http://www.epd.gov.hk/epd/msw/>

<sup>12</sup> [http://www.epd.gov.hk/epd/english/environmentinhk/waste/prob\\_solutions/eco\\_front.html](http://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/eco_front.html)



more detailed plans are to be developed for land use, environmental management and urban transport projects. Selected projects will then be funded by the central and state governments.

### C. Energy and climate change

26. China's actions on renewable energy were stipulated by the 2005 Renewable Energy Law, which serves as the principal framework for development of the sector. The law offers a variety of financial incentives. The combination of investments has encouraged major advances in the development of renewable energy. The energy sector as a whole generates output worth \$17 billion and, at the end of 2009, employed an estimated 1.5 million, of which 600,000 were in the solar thermal industry, 266,000 in biomass generation, 55,000 in solar PV, and 22,200 in wind power. Not only does the energy sector benefit from job creation, but health and sanitation also benefit from the improved availability of hot water, made more feasible and economic with solar water heater systems.<sup>13</sup>

27. In order to address the persistent shortage of electricity and improve the energy access of the off-grid population, India kicked off phase 1 of the National Solar Mission (NSM), which includes the promotion of renewable energy, such as solar and biomass in particular, to be supplemented by biomass and expansion of the grid coverage and capacity. The objectives also include the reduction of GHG emissions as well as conventional air pollutants originating from older thermal power plants. The government also aimed at improving industrial energy efficiency, driven by mandatory industrial energy audits under the 2001 Energy Conservation Act (ECA) and by fixing specific energy reduction targets for the top emitting industries as part of the 2008 National Action Plan on Climate Change (NAPCC). The government intervention includes the financing/ development of renewable technologies, as well as the provision of energy-efficiency measures and the development of clean applications in transport, buildings, appliances, lighting and the ICT sector. All the above-mentioned measures targeted the improvement of energy access, including remote and poor communities, establishing new growth engines, enhancing industry's resilience to resource constraints and creating additional jobs.<sup>14</sup>

28. Being one of the world's most vulnerable countries in terms of the possible impact of climate change, Bangladesh's initial national communication under the United Nations Framework Convention on Climate Change highlighted the complexity of environment and land-use patterns and their implications for the vulnerability and depletion of natural resources in a country that is heavily agrarian. Its Climate Change Action Plan (2008) placed the highest priority on the pillars of "food security, asocial protection and health," with a view to ensuring that the poorest and most vulnerable in society, including women and children, are protected from climate change and that all programmes focus on the needs of this group for food security, safe housing, employment and access to basic services, including health.<sup>15</sup>

<sup>13</sup> <http://www.unep.org/greeneconomy/SuccessStories/RenewableEnergyinChina/tabid/29865/Default.aspx>

<sup>14</sup> <http://www.greenpurchasingasia.com/node/308>

<sup>15</sup> Bangladesh (2008), *Bangladesh Climate Change Strategy and Action Plan 2008*.

## D. Forest and agriculture

29. The Government of Nepal has implemented two policies, the Community Forestry and the Leasehold Forestry Policy, in order to reverse the trend towards declining forest coverage, by designating protected forest areas and by promoting community forestry and environmental protection. The advantages of community forestry include employment and income generation from forest protection, tree felling and log extraction, and non-timber forest products. Economic benefits are in the form of sustained wood fuel sources, which contribute more than three quarters of energy needs to households. Improved forest management and cover also contribute to nature conservation. Some community forest activities have initiated a scholarship programme for low-income people, as well as savings and credit operations among generation activities.<sup>16</sup>

30. In China, in response to a severe Yellow River drought in 1997 and devastating floods in 1998 in the middle Yangtze region, the central Government immediately instituted the Natural Forest Protection Programme (NFPP) in 1998, and initiated the Sloping Land Conversion Programme (SLCP) or “Grain for Green”, in 1999. The SLCP was the first and the most ambitious payment for environmental services (PES) programme in China. For the purpose of restoring the damaged land and restoring its flood control function, it stipulated that farmers who converted degraded and highly sloping cropland back to ecological/economic forests, or grasslands would be provided with an annual in-kind subsidy of grain and a cash subsidy; and free seedlings at the beginning of the planting period. In addition, the programme was oriented towards restructuring rural economies so that participating farmers could gradually shift into more environmentally and economically sustainable activities, such as livestock breeding and off-farm work.<sup>17</sup>

31. In 2008, the Government of Viet Nam issued the “Pilot Policy for Payment for Forest Ecosystem Services” with a view to combating rural poverty by helping communities to protect forests and improve local livelihoods, and by establishing a sustainable source of private funding for that purpose. The experience of the local pilot projects has been embedded into the national policy framework, with linkages to many national initiatives. The total PES income in 2010 was about 18 per cent higher than planned while the total expenditure was about 54 per cent less than planned. In 2010, the government issued the PES Decree. PES proponents believe that, once the decree is scaled up to the national level, the derived revenues could reach \$1 billion. The project’s model has been adopted by many South-East Asian countries, for example, Indonesia, Cambodia, the Lao People’s Democratic Republic, and Thailand.<sup>18</sup>

32. In China, the Dry Land Sustainable Agriculture Project aims to support the development of partnerships between farmers and local agro-

<sup>16</sup> <http://www.unep.org/greeneconomy/SuccessStories/ForestManagementinNepal/tabid/29869/Default.aspx>

<sup>17</sup> [http://faculty.washington.edu/stevehar/JMS\\_per\\_cent20paper.pdf](http://faculty.washington.edu/stevehar/JMS_per_cent20paper.pdf)  
[http://www.cifor.org/pes/publications/pdf\\_files/China\\_paper.pdf](http://www.cifor.org/pes/publications/pdf_files/China_paper.pdf)  
<http://http://www.sciencedaily.com/releases/2011/05/110511114213.htm>

<sup>18</sup> [http://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)  
<http://enviroscope.iges.or.jp/modules/envirolib/view.php?docid=3265>  
[http://www.greengrowth.org/capacity\\_building/National-Seminar/2011/Thailand/Documents/PRESENTATIONS/2nd/7.pdf](http://www.greengrowth.org/capacity_building/National-Seminar/2011/Thailand/Documents/PRESENTATIONS/2nd/7.pdf)

enterprises to improve sustainable farming practices, increase farming incomes and reduce poverty. The project area is focused on 27 counties in the Gansu, Henan and Shandong provinces, where rural household income reaches a mere two thirds of the national average. Through the adoption of sustainable farming practices, cereal yields have increased considerably: wheat by 40 per cent and spring maize by 38 per cent; the availability of irrigation and drinking water has increased; soil erosion has been reduced, pesticide and fertilizer use have decreased; and there has been an increase in social capital formation through farmers' mutual aid groups and in the role of women, who now play a major part in fruit and vegetable management and livestock rearing.<sup>19</sup>

33. The case of Viet Nam's "No Early Spray" campaign represents an innovative use of communication techniques to raise awareness of issues related to the environment and poverty reduction. In 1994, the Ministry of Agriculture and Rural Development of Viet Nam and the International Rice Research Institute launched a campaign aimed at achieving large-scale reductions in pesticide use by rice farmers in the Mekong delta. Targeting 2 million rural households, the campaign worked to increase farmers' awareness of pesticide-related issues, including associated health and environmental problems. The campaign used radio drama clips, leaflets and posters combined with on-the-ground activities to encourage responsible use of pesticides by farmers. Follow-up surveys indicate that, as a result of the campaign, insecticide use dropped by half. Key to this success was the rigorous qualitative and quantitative research undertaken prior to setting communications objectives. This research helped campaign organizers successfully develop innovative messages and select media tools appropriate to the target audience. As a result, the campaign utilized an entertainment-education approach, which has been successfully applied in other fields, such as HIV/AIDS awareness, fertilizer use, and social change.<sup>20</sup>

## E. Assessment

34. The examples given above are but a small sample of what can be achieved. In fact, many other countries are taking similar approaches and achieving significant success. This reflects the growing attention being paid by Asia-Pacific countries to the linkage between environmental, economic and social challenges, as well as the importance of integrated and multi-sectoral policy responses.

35. However, such integrated responses are considered, developed and conducted mainly by environmental ministries, and have yet to attract sufficient policy attention from economic and social development planning or finance ministries. As a consequence, such sustainable development policies merely capture marginal social and economic "co-benefits", or mere "by-products" in achieving environmental objectives.

36. Institutional capacity-building at the national level will hold the key to strengthening such integrated approaches. Further efforts are necessary for enhancing policy coherence and coordination among relevant ministries so that economic and social policies consciously take into due consideration environmental sustainability and environmental policies take due account of economic and social factors; environmental and economic policies should be

<sup>19</sup> <http://pid.adb.org/pid/LoanView.htm?projNo=38301&seqNo=01&typeCd=3>  
<http://www.fao.org/docrep/006/y3951e/y3951e05.htm>

<sup>20</sup> <http://www.unep.fr/shared/publications/pdf/DTIx0679xPA-CommunicatingEN.pdf>

consciously supported by a socially inclusive approach. The integration of economic and environmental objectives has always been a main feature of the green economy approach.

37. In further developing and implementing environmentally, economically and socially integrated policies at the national level, it may be worth noting that the member States, through the Ministerial Declaration on Environment and Development in Asia and the Pacific, 2010, recognized that “green growth, as appropriately adapted to country-specific circumstances and as understood in the context of sustainable development, is one of the approaches for supporting rapid economic growth, the achievement of the Millennium Development Goals and environmental sustainability” and decided “to work together towards strengthening regional and subregional cooperation for the promotion of environmentally sustainable economic growth, or green growth, as one of the prerequisites for attaining the Millennium Development Goals and sustainable development”.

#### **IV. A way forward**

38. As presented in paragraph 36 above, institutional capacity-building at the national level will hold the key to strengthening such an integrated approach. Further efforts are necessary for enhancing policy coherence and coordination among relevant ministries so that economic and social policies consciously take into consideration environmental sustainability and environmental policies take due account of economic and social factors; environmental and economic policies should be consciously supported by a socially inclusive approach. The integration of economic and environmental objectives has always been a main feature of the green economy approach.

39. In an effort to assist member countries in developing and implementing the policies addressing the broader implications of environmental sustainability with the persistent socio-economic challenges, or effectively attaining the Millennium Development Goals and sustainable development, ESCAP has been committed to strengthening cross-sectoral and holistic approaches to inclusive and sustainable development.

40. The Environment and Development Division of ESCAP pioneered the advocacy and piloting of innovative policies which integrate environmental, economic and social dimensions, by implementing the pro-poor public-private partnership (5P) project from 2003 as a major follow-up to the World Summit on Sustainable Development, highlighting the pro-poor element in the architecture and philosophy of public-private partnerships (PPPs) as an alternative means of providing basic services and ensuring the well-being of the people in a financially, administratively and technically efficient way. The project started with pilot demonstrations in a bio-diversity park in Pakistan, small-hydro development in Indonesia, and improvement in water distribution in Sri Lanka.

41. While the pro-poor element has since been addressed in a number of the activities of the secretariat, in many cases, in implicit ways, the secretariat now attempts to more explicitly promote the cross-sectoral and holistic approach to inclusive and sustainable development. The draft programme of work for the biennium 2012-2013 describes the objective of the environment and development subprogramme as follows: “to integrate environmental sustainability in economic and social development and enhance regional cooperation on environment, energy and water resources management as well as urban development, including the application of the green growth or

environmentally sustainable economic growth approach, as well as other effective policy initiatives, for inclusive and sustainable development in Asia and the Pacific”.<sup>21</sup>

42. To achieve this objective, the secretariat is expected, among other things, to enhance the understanding and capacity of local and national governments and other stakeholders to develop and implement strategies for integrating environmental sustainability in economic and social development, including the green growth approach and other effective policy initiatives, effective planning and management of natural resources development and gender mainstreaming for poverty reduction and inclusive and sustainable development in urban and rural areas. The secretariat will also aim at strengthening consensus among ESCAP member States on regional perspectives in strategies for integrating environmental sustainability in economic and social development, while promoting regional cooperation in this respect.

43. In actions to implement the above strategy, the secretariat is strengthening its emphasis on the quality of growth, highlighting the balance between economic, social and ecological qualities, rather than chasing the quantity of economic growth only through the conventional development paradigm. Among other things, its Green Growth Capacity Development Programme, implemented with support from the Republic of Korea, the United Kingdom of Great Britain and Northern Ireland and other member States, would provide the primary vehicle for enhancing the institutional capacity of Asia-Pacific countries to address the broader implications of environmental sustainability in the face of persistent socio-economic challenges in an integrated manner.

44. Following the successful collaboration with Cambodia and Kazakhstan in strengthening national institutional capacity, the secretariat recently received a request from the Government of Mongolia to assist in setting up the Green Growth Committee and National Green Growth Roadmap to promote an integrated inter-ministry approach to enhancing policy coherence and coordination for achieving sustainable development, including economic and social development as well as environmental sustainability goals.

45. One concrete example of ESCAP action to support the efforts of member States to address economic, social and environmental challenges in an integrated way is the publication of *Guidelines for Developing Eco-efficient and Socially Inclusive Infrastructure*, in partnership with ECLAC and UN-HABITAT, as part of a Development Account project. As the report has presented addressed useful policy options for building competitive and liveable cities in Asia and the Pacific, the work will continue under the KOICA-funded project on a low carbon green growth road map for East Asia.

---

<sup>21</sup> See E/ESCAP/67/14, Subprogramme 4, Environment and development, Objective of the Organization.

## **V. Issues for consideration**

46. Members and associate members may wish to exchange views, experiences and information on national efforts as well as effective policy options for addressing the broader implications of environmental sustainability with the persistent socio-economic challenges in an integrated manner.

47. The Committee may wish to advise the secretariat regarding the future direction of its work in the relevant context.

---