

## Environment and Sustainable Energy Development in the Asia-Pacific Region\*

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The majority of the countries of the Asia-Pacific region are mainly developing countries.<sup>1</sup> To them, the sustainable development of energy resources appears to be a constant challenge at a time when there seems to be the tendency to opt for economic development at the expense of environment. However, it has to be appreciated that in reality the right to sustainable development belongs to people and not to government. The purpose of this article is to focus on certain important current legal issues of sustainable energy development in many of the developing countries of Asia Pacific. Section I will highlight the dilemma of development *v* environment—a characteristic feature in environmental regulation in the Third World—in the region. Section II will trace the inadequacy of provision for environmental protection in international energy development agreements and in the legislative regime there. Section III will be concerned with the present state and policy trends relating to sustainable energy development issues in the Asia-Pacific region horizontally. Section IV will evaluate certain recently emerging approaches to deal with the matter of sustainable development when government proves to be part of the problem and when there is little or no effective environmental regulation for the protection of the environment. In Section V, some concluding remarks will be made.

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1 There are 21 Asia Pacific Economic Co-operation ("APEC") member economies: Australia, Brunei Darussalam, Canada, Chile, the People's Republic of China, Chinese Taipei, Hong Kong China, Indonesia, Japan, the Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, the Public of the Philippines, Singapore, Russia, Thailand, the United States and Vietnam.

### I. Development v environment

There is no doubt that the development of energy has profound implications on the environment. In various phases of energy operations such as exploration, refining, transportation and distribution, the protection of the environment remains a crucial issue. So, the matters "energy", "environment" and "sustainable development" are closely interlinked.<sup>2</sup> Until recently, the prevailing tendency among the Third World developing countries has been to opt for economic development at the expense of environment.<sup>3</sup> The concept of sustainable use of energy resources once appeared to have been completely absent in the Third-World philosophy. This may be attributed to their dire need for economic growth and development at any cost. Increasing demand of domestic consumption, excessive military expenditure, politically motivated production quotas, competitive production for temporary international political gains, or export goals to maximise hard currency earnings for various economic needs have contributed to the depletion of resource deposits in many countries already.<sup>4</sup> There is a dire lack of commitment to environmental protection and sustainable development in most energy resource

2 For controversies over the relationship between environment and sustainable development, see a most recent study: "The Great Race: A Survey of the Global Environment" in *The Economist*, July 6, 2002, pp.3-5. See also Nancy Dunne, "Ecuador Pipeline Fuels Environmental Groups' Anger (Rich nations are accused of undermining Green Goals When Economic Objectives are Threatened)", *Financial Times*, August 23, 2002, p.8.

3 See generally, Nancy Dunne, *op. cit.*; Alan Beattie, "Chad/Cameroon Pipeline: Bank's Inspectors Voice Concerns over Environmental Impact and Poor Profit Share for Local Population—World Bank Team Attacks own Oil Project", *Financial Times*, August 19, 2002, p.8. For more reports, see: [www.ft.com/globaleconomy](http://www.ft.com/globaleconomy). See also Mark McDowell, "Development and Environment in ASEAN" in (1989) 62 *Pacific Affairs* 3, p.307; N.J. Trenton and Asmara, *Ogoni's Agonies: Ken-Saro-Wiwa and the Crisis in Nigeria* (Eritrea, Africa World Press Inc, 1998); W.M. Adams, *Green Development: Environment and Sustainable Development in the Third World* (Routledge, London, 1990); C. Ake, *Oil Companies and Environmental Pollution in Nigeria: Political Economy of Nigeria* (Longman, London, 1985); Sahabat Alam Malaysia, *Environment, Development and Natural Resource Crisis in Asia and the Pacific* (Penang, 1984); W. Boyd, *Ken-Saro-Wiwa—A Month and Day: Detention Diary* (Penguin Books, London, 1995); O.N. Douglas, *An Overview of Environmental Protection Law and Practice in the Niger Delta* (unpublished LLM dissertation, De Montfort University, 1997); D. Wheeler, R. Rechtman, H. Fabig and R. Boele, "Shell Nigeria and the Ogonis: A Study in Unsustainable Development— Analysis and Implications of Royal Dutch/Shell Group Strategy" in (2001) *Sustainable Development* Vol.9; K.L. Abdullah, "Energy Policies for Sustainable Development in the Developing Countries" in (1994) 22 *Energy Policy* 30-36; O. Davidson and S. Karekezi, "A New Environmentally Sound Energy Strategy for the Development of Sub-Saharan Africa" in S. Karekezi and G.A. Mackenzie (eds), *Energy Options for Africa: Environmentally Sustainable Alternatives* (Zed Books Ltd, 1993), pp.10-14; J. Kimmerling, *Petroleum Development in Amazonian Ecuador: Environmental and Socio-cultural Impacts* (Natural Resource Defence Council, 1989); M. Radetzki, "Does Economic Growth Deplete the Environment?" in Zhiguo Gao (ed.), *Environmental Law and Natural Resources and Energy* (CPMLP, 1997), pp.30-42; Shaun Breslin, "China's Environmental Crisis in a Global Context" in (1996) 10 *Global Society* No.2, p.125.

4 See generally, D.W. Pearce, *The Economics of Natural Resource Depletion* (Macmillian Press Ltd, 1975); M. Simmons, "Oil in the Twenty-First Century: Failure to Recognise Depletion May

development agreements in the Third World. The consequence is not difficult to fathom from the following facts:

"Domestic resources of oil have dried up in many countries. The rise and decline of the giant Renqu oil field in China, which went on stream with an annual production of 10 million tons in 1976 and is now nearly depleted, in a period of only about 15 years, provides the best example of this depletion practice in developing producer countries. As the fourth largest oil producer in the world, China will become a net importer of oil by the middle of this decade . . . , if substantial additional resources are not discovered and developed rapidly. The estimated recoverable reserves of oil and gas in China has a possible life of only about 20 years at the present rates of production and consumption. If the present rates of depletion continue unchanged, Indonesia will no longer be a member of the Organisation of Petroleum Exporting Countries ('OPEC') by the year 2010."<sup>5</sup>

The United Nations Commission on Sustainable Development has very recently in its ninth session (CSD-9) noted that "Current patterns of energy production, distribution and utilization are unsustainable".<sup>6</sup> This had been echoed earlier in a special energy report to the World Commission on Environment and Development ("WCED"):

"Unfortunately, today's energy choices by governments, industries and individuals, and the narrow terms of reference within those choices are made, results in overall energy patterns which, in the aggregate are not sustainable, neither ecologically, nor economically."<sup>7</sup>

Although this issue was expected to get due attention in the recent World Summit on Sustainable Development in Johannesburg,<sup>8</sup> it did not.

## II. Inadequate provision for environmental protection

It is a matter of great concern today that energy resource development agreements in the Third World developing countries, including those in the Asia-Pacific region, make little or no reference to the sustainable development and environmental protection

issues.<sup>9</sup> Even if there is any reference to environmental matters, it may be found in very broad terms.<sup>10</sup> This seems to be a general trend in many other countries'—both developed and developing—contractual practice.<sup>11</sup> The provision for environmental protection or reference to it is characteristically short, and there is hardly any provision for the method or arrangement as to how to implement the environmental requirements. They are rather found in the fashion of subsidiary provisions as in the general obligation clause for the contractor or in similar clauses. Very few international petroleum or energy development contracts in many Asian countries provide separate and detailed provisions for environment. One such typical example may be given from the recent *Model Production Sharing Contract* of Bangladesh (March 1997) as follows:

"While conducting Petroleum Operations,<sup>12</sup> take necessary measures for conservation, safety of life, property, crops, fishing and fisheries, navigation, *protection of environment*, prevention of pollution and safety and health of personnel, including but not limited to." [Article 10.6] (emphasis added)

"taking all necessary precautions to prevent pollution of or damage to the environment." [Article 10.6(f)]

The provision occurs in the clause entitled "Article 10: Contractor's Obligations".<sup>13</sup> Further, it appears to be a characteristic practice in international petroleum development agreements in many developing countries to incorporate certain good-sounding standards like "proper and workmanlike manner", "necessary precautions", "appropriate scientific method", "sound technical and engineering principles", "good oil field practice", or "best environmental practices" when it comes to the protection of the environment. These expressions are so broad that they may mean, in the generic sense, many things to many people, while in the specific context they may not mean anything, especially when it comes to the question of enforcement. The concern has been expressed by some commentators that "such lax environmental provisions provide

Harm Long-term Supply" in (September 1997) *Petroleum Economist* 49–52; Mamdouh G. Salameh, "Impact of Military Expenditure on Oil Depletion" in (August 1998) *Petroleum Review* 38.

5 See Z. Gao, "International Petroleum Exploration and Exploitation Agreements: A Comprehensive Environmental Appraisal" in T.W. Walde and G.K. Ndi (eds), *International Oil and Gas Investment: Moving Eastwards?* (Graham & Trotman/Martinus Nijhoff, 1994), pp.325–326.

6 See "Report of the Ad hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development", United Nations Economic and Social Council, Commission on Sustainable Development (Ninth Session, April 16–27, 2001), E/CN.17/2001/15, p.3.

7 *Energy 2000: A Global Strategy for Sustainable Development* (Zed Books Ltd, London, 1987) p.vii. See also L. Ibibia, *Managing the Environmental Aspects of the Upstream Petroleum Investments* (PhD Thesis, Centre for Petroleum and Mineral Law and Policy, University of Dundee, 1998).

8 See World Summit Policy Brief No.9: "From Rio to Johannesburg: Mining Less in a Sustainable World" (by Payal Sampat) at: [www.worldwatch.org/worldsummit/briefs/20020806](http://www.worldwatch.org/worldsummit/briefs/20020806).

9 See the UNDP Report in G.H. De B. Romilly, *Environmental Law Reform in Seychelles: Marine Pollution Legislation* (1991), p.86; UNCTC, *Alternative Arrangements for Petroleum Development: A Guide for Government's Policy Makers and Negotiators*, UN Doc.ST/CTC/43 (1982), p.43; Thomas Wälde, "Environmental Policies Towards Mining in Developing Countries" in (1992) 10 J.E.R.L. 327; A. Warhurst, "Environmental Management in Mining and Mineral Processing in Developing Countries" in (1992) *Natural Resources Forum*, p.39; Thomas Wälde and George K. Ndi, "International Petroleum Investment and Policies: Green, Privatising, and Moving Eastward?" in Thomas Wälde and George K. Ndi (eds), *International Oil and Gas Investment: Moving Eastwards?* (Graham & Trotman/Martinus Nijhoff, 1994), pp.19–27.

10 See generally, R. Brown and P. Daniel, "Environmental Issues in Mining and Petroleum Contracts" in (1991) 22 *I.D.S. Bulletin* No.4, pp.45–49; K. Natio, H. Mayoi, J. Otto, D. Smith and M. Kamitani, "Mineral Projects in Asian Countries: Geology, Regulation, Fiscal Regimes and the Environment" in (1998) 24 *Resources Policy* No.2, pp.87–93.

11 See Anthony Jennings, *Oil and Gas Exploration Contracts* (Sweet & Maxwell, London, 2002), pp.122–123, 176–177.

12 "'Petroleum Operations' means the Exploration Operations, the Development Operations, the Production Operations, and other activities related to those Operations carried out under the Contract" [Article 1.60].

13 For more instances, see "Draft Production Sharing Contract of August 1976", in *Barrows Company, Asia Contracts, Supplement No.52* (1977); "Contract of Work Between the Government

the possibility of applying environmental double standard".<sup>14</sup> It can be added to it that such provisions, in reality, provide leverage to the party of stronger bargaining power to manipulate the flexibility of such standards. It is usually the multinational oil companies that win the game at the end of the day. Thus, such cursory reference to environment and its protection is, in fact, futile without detailed provisions for specific obligations of the oil company and for method and mechanism for their implementation in the context of such agreements.

One scholar has aptly summarised the position in a fairly recent study based on the practices of four representative developing countries such as Thailand, Indonesia, Brazil and China and on various other relevant studies as follows:

"There is in recent petroleum agreements a slowly increasing recognition of the issue of environmental protection, but most agreements have little more than conventional requirements on 'sound technical and engineering principles' or 'good international oil field practice'.

Many countries still lack comprehensive and systematic environmental regulation and administrative capacity; this is particularly true in the petroleum sector.

Developing countries have, to date, generally not required the submission of environmental impact assessments prior to exploration operations nor have they required appropriate rehabilitation or abandonment procedures after exploitation.

A few contractual systems have devoted greater emphasis to environmental protection, but in many cases the environmental objectives of these provisions have not been adequately backed up by political and administrative constituencies.

Sustainable development is, to date, a non-issue in the legal frameworks for international petroleum exploration and exploitation. Not a single contractual system has made even a general reference to the principle."<sup>15</sup>

It should be appreciated that the current contractual practices with regard to environmental protection and sustainable development in the field of energy resource development in the Third World countries are not satisfactory at all. In a recent High-level Regional Meeting on Energy for Sustainable Development (held in Bali, Indonesia, on November 23 and 24, 2000), the Executive Secretary of ESCAP while noting that energy was one of the main drivers of socio-economic development, cautioned, not surprisingly, that "if the current pattern was allowed to continue, energy production and consumption would have a tremendous detrimental impact on the environment".<sup>16</sup> Until recently, many developing countries in

the Asia-Pacific region lacked in adequate and sophisticated environmental legislation and also in effective enforcement mechanisms.<sup>17</sup> This was also true in case of some developed countries in the region.<sup>18</sup>

### III. Situation and issues of sustainable energy development in the Asia-Pacific

Now the tide has changed its course with the Rio Declaration of 1992<sup>19</sup> and the recent environmental movement throughout the world in both developed<sup>20</sup> and developing countries<sup>21</sup> of the world. The Rio Declaration endorses the concept of sustainable development.<sup>22</sup> It proclaims that the right to development must be equitable to the developmental and environmental needs of the present and the future generations.<sup>23</sup> It insists that environmental protection must

17 See UNCTAD, "Environmental Legislation for Mining and Metal Industries in Asia", UNCTAD/COM/40 (1994). James Otto, Koh Natio, George (Rock) Pring, "Environmental Regulation of Exploration and Mining Operations in Asian Countries" in (1999) *Natural Resources Forum* No.23, pp.323-334; James M. Otto and J. Cordes, *Sustainable Development and the Future of Mineral Investment* (UNEP, Paris, 2000). See also "Environmental Harm and Human Right Issues Implications for Petroleum and Mineral Investments" at: [www.dundee.ac.uk/ceplp/journal/html/articles-3bmuni](http://www.dundee.ac.uk/ceplp/journal/html/articles-3bmuni), p.24.

18 On Australia, see Adrian J. Bradbrook, "Energy Law: The Neglected Aspect of Environmental Law" in (1993) 19 *Melbourne University Law Review* 1.

19 "The Rio Declaration on Environment and Development: Report of the United Nations Conference on Environment and Development", Rio de Janeiro, June 3-14, 1992 (UN Doc A/Conf 151/26, Vol.1).

20 See Bastiaan van de Esch, "Integrating the Environment into the Energy Policy of the European Union" in (1995) 13 *J.E.R.L.* No.1, p.14; Catherine Redgwell, "Energy, Environment and Trade in the European Community" in (1994) 12 *J.E.R.L.* No.1, p.128. See also generally, David S. MacDougall and Thomas W. Wälde, *European Community Energy Law: Selected Topics* (Graham & Trotman/Martinus Nijhoff, 1994), ss.3 and 4; Donald A. Reid, "European Union Environmental Law and Policy in Relation to Oil and Gas" in Zhiguo Gao (ed.), *Environmental Regulation of Oil and Gas* (Kluwer Law International, 1998), p.171; Jill A. Kotvis, "Environmental Issues in International Oil and Gas Exploration and Production", *ibid.*, p.249.

21 See Jay Paul Wagner, "Oil and Gas Operations and Environmental Law in Latin America" in (1998) 16 *J.E.R.L.* No.2, p.153; Bob Williams, "Foreign Petroleum Companies Developing New Paradigm for Operating in Rain Forest Region" in *Oil and Gas Journal*, April 28, 1997, p.38; P.D. Okonma, "Right to a Clean Environment: The Case for the People of Oil Producing Communities of Nigeria's Niger Delta" in (1997) 41 *Journal of African Law* 45.

22 The term "sustainable development" was first used in 1987 by the World Commission on Environment and Development (the Brundtland Commission) to denote that development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs—see *Our Common Future* (Oxford University Press, 1987). The 1992 UNDP Report states: "Sustainable development is a process in which economic, fiscal, trade, energy, agriculture and industrial policies are all designed to bring about a development that is economically, socially and ecologically sustainable." See also Sharachandra M. Lélé, "Sustainable Development: A Critical Review" in (1999) *World Development*, Vol.19, No.6, pp.607-621; A. D'Amato, "What Obligations Does Our Generation Owe to the Next? An Approach to Global Environmental Responsibility" in (1990) 84 *A.J.I.L.* 190; Catherine Redgwell, *Intergenerational Trusts and Environmental Protection* (Manchester University Press, 1999).

23 Principle 3. As noted by *The Economist* that a publication from UNESCO, a United Nations Agency, offered the follow-

14 Zhiguo Gao, George Akpan and Jim Vanjik, "Public Participation in Mining and Petroleum in Asia and the Pacific: The OK Tedi Case and Its Implications" in Donald N. Zillman, Alastair R. Lucas and George (Rock) Pring (eds), *Human Rights in Natural Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford University Press, 2002), p.687.

15 Z. Gao, *op. cit.* (1994), pp.327-328.

16 "Economic and Social Commission for Asia and the Pacific: Report of the High-Level Regional Meeting on Energy for Sustainable Development", E/ESCAP/MESD/Rep., December 14, 2000, para.28.

constitute an integral part of the development process.<sup>24</sup> The concept of sustainable development, though still a very controversial one,<sup>25</sup> aims to provide a mechanism for reconciling growth and development, including energy production and sustainable use, with environmental protection.<sup>26</sup>

The Rio impact could be felt in the APEC Economic Leaders' declaration of Common Resolve of 1994 as follows:

"Our objective to intensify development co-operation among the community of Asia Pacific economies will enable us to develop more effectively the human and natural resources of the Asia Pacific region so as to attain *sustainable growth and equitable development of APEC economies*, while reducing economic disparities among them, and improving the economic and social well-being of our people . . . *Effective co-operation will also be developed on environmental issues, with the aim of contributing to sustainable development.*"<sup>27</sup> (emphasis added)

The 1995 Osaka Declaration of the APEC Economic Leaders again endorsed the environmental concern as follows:

"The Asia-Pacific region's fast-expanding population and rapid economic growth are forecast to sharply

ing vision of the future: "Every generation should leave water, air and soil resources as pure and unpolluted as when it came on earth. Each generation should leave undiminished all the species of animals it found existing on earth." ("The Great Race: A Survey of the Global Environment" in *The Economist*, July 6, 2002, p.3).

24 Rio Principle 4. The matter of integration of environmental protection and economic development has been recently regarded by the International Court of Justice as one of the decisive elements of the *Gabèikovo-Nagymaros* case [see "Case Concerning the *Gabèikovo-Nagymaros* Dam" in (1997) I.C.J. Reports 7.

25 *The Economist*, July 6, 2002, "The Great Race: A Survey of the Global Environment", p.3: "Sustainable development is a dangerously slippery concept." It is "a buzz-word largely devoid of content". (*ibid.*, p.4). The present UN Secretary General Kofi Annan once said (2001): "Our biggest challenge in this new century is to take an idea that seems abstract—sustainable development—and turn to it, too, into a daily reality for all the world's people." as quoted in "Environmental Governance for Sustainable Development in Asia and the Pacific" (UNDP & ESCAP), World Summit on Sustainable Development, Johannesburg 2002. See generally, Bryan Cartledge, *Energy and the Environment: The Linacre Lectures 1991–1992* (Oxford University Press, 1993); Winfried Lang, *Sustainable Development and International Law* (Graham & Trotman/Martinus Nijhoff, 1995); P. Birnie and A. Boyle, *International Environmental Law*, p.123; Alexander Gillespie, *International Environmental Law Policy and Ethics* (Oxford University Press, 1997), esp. Chap.VI "The Rights of Future Generations as a Justification for Environmental Protection", pp.107–126; Vaughan Lowe, "Sustainable Development and Unsustainable Arguments" in Aland Boyle and David Freestone (eds), *International Law and Sustainable Development: Past Achievements and Future Challenges*, pp.19–37; W. Berkerman, "'Sustainable Development': Is It a Useful Concept?" in (1994) 3 *Environmental Values* 191.

26 See "Global Energy Charter for Sustainable Development" (adopted by the World Clean Energy Conference organised by the Energy Coalition for UNCED, Earth Summit 1992 and co-sponsored by the International Progress Organisation (Geneva, November 4–7, 1991), at: [www.cmdc.net/echarter](http://www.cmdc.net/echarter) and at: [www.cmdc.net/charterdetails](http://www.cmdc.net/charterdetails); *Toward Solutions: Sustainable Development in the Energy Sector*, OECD/IEA (Paris, 2002); C. Redgwell, "Energy, Environment and Trade in the European Community" in (1994) 12 J.E.R.L. No.1, p.149.

27 *The APEC Declaration of Common Resolve* (para.8), November 15, 1994 in (1995) I.L.M. Vol.34, p.758.

increase the demand for food and energy and the pressures on the environment. We are agreed on the need to put these inter-related, wide-ranging issues on our long-term agenda and consult further on ways to initiate joint action so as to ensure the region's economic prosperity is sustainable."<sup>28</sup>

The 1995 APEC Osaka Action Agenda, which aims at the implementation of the Bogor Declaration, mentions environment and sustainability of development in the field of energy, amongst others, as follows:

"*Common Policy Concepts*. Regional energy consumption is rapidly increasing in tandem with the economic expansion of the Asia-Pacific region, turning energy into a potential bottleneck to sustainable development. APEC economies will address the simultaneous achievement of the '3 Es' [economy, energy and environment] by sharing policy principles and enhancing closer co-operation toward the development of APEC as a sustainable energy community. APEC economies will set priority on the following: [ . . . ]

(c) reducing environmental impact of the energy sector."<sup>29</sup>

From the above, it is noticeable that the environmental concerns and sustainable development issues have recently gained momentum in the Asia-Pacific region.<sup>30</sup> Despite such trends the developing countries of the region are more prone to economic growth and development than to environment and sustainable development. The developed countries of APEC tend to be sympathetic to the urgent need of development of their developing country counterparts while balancing environment and development. This is quite apparent in the above mentioned declarations and action plans of APEC. At this stage, it can be said at best that along with the desire for economic development, the concerns of environment and sustainability of development are getting increasingly serious consideration in APEC, though little has happened so far in the form of binding international obligations under

28 *APEC Economic Leaders' Declaration for Action* (para.9), Osaka, Japan, November 19, 1995.

29 *APEC Osaka Action Agenda—Implementation of the Bogor Declaration* (s.5) in (1996) I.L.M. Vol.35, p.111.

30 See generally, André Dua and Daniel C. Esty, *Sustaining the Asia Pacific Miracle: Environmental Protection and Economic Integration* (Institute for International Economics, Washington DC, October 1997); Ben Boer, et al., *International Environmental Law in the Asia Pacific* (Kluwer Law International, 1998); Mohan P.C. Munasinghe, "Sustainable Energy Development ('SED'): Issues and Policy" in Paul Kleindorfer, et al. (ed.), *Energy, Environment and the Economy: Asian Perspectives* (Edward Elgar, Cheltenham, UK/Brookfield, USA, 1996), p.3; Shehzad Sadiq, "Balancing Economic Growth, Energy Development and Environmental Impact", *ibid.*, p.83; Alastair R. Lucas, "The North American Agreement on Environmental Co-operation: International Environmental Jurisdiction over the Energy Sector" in (1998) 16 J.E.R.L. 84; Preeti Soni, *Energy and Environmental Challenges in Central Asia and the Caucasus: Windows for Co-operation* (Tata Energy Research Institute, New Delhi, India, 1996); Alan Dupont, *The Environment and Security in Pacific Asia* (Adelphi Paper 319, International Institute for International Studies, London, 1998); *Sustainable Development and Minerals and Metals: An Issues Paper by Natural Resources Canada* (September 1995), see at: [www.nrcan.gc.ca/nrcanhp\\_e](http://www.nrcan.gc.ca/nrcanhp_e). See also "The Phnom Penh Regional Platform on Sustainable Development for Asia and the Pacific" (November 29, 2001) as adopted in the World Summit on Sustainable Development Asia-Pacific Regional Preparatory Meeting (November 27–29, 2001, Phnom Penh, Cambodia), see at: [www.iisd.ca/linkages/2002/wsasi](http://www.iisd.ca/linkages/2002/wsasi).

the auspices of APEC itself.<sup>31</sup> It is noteworthy that the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources<sup>32</sup> (not yet entered into force) has the objectives "to promote joint and individual State action for the conservation and management of the natural resources of the ASEAN Region". It also provides that "the Parties agree to promote joint or individual State action", "to conserve ecological processes by reducing, controlling or preventing environmental degradation and pollution" (Arts 1, 10 and 11). It is surprising that although there are about 2000 bilateral investment promotion and protection treaties at present between various States representing various geographical areas and regions, there is hardly any reference to the protection of the environment that may be related to the investment activities taking place under those treaties.<sup>33</sup> The treaties involving the Asia-Pacific countries are not an exception to this reality. This is despite the fact that investment activities, whether in the oil and gas industry, minerals, or manufacturing plants, may have serious implications to the environment. These treaties have unfortunately failed to respond to the particular need of regulatory control of the environmental matters on which they have direct bearing.<sup>34</sup> Perhaps such a type of specific inter-state treaty can deal with the investment-related environmental concerns more effectively, rather than a general one.<sup>35</sup> Although the North Atlantic Free Trade Agreement ("NAFTA")<sup>36</sup> and the Energy Charter Treaty ("ECT")<sup>37</sup> incorporates some provisions concerning the protection of the environment in the context of foreign investment, they are primarily hortatory and devoid of any meaningful measures for the protection of the environment.<sup>38</sup> One may consider

them just lip service for environmental protection in those important regional instruments. The recent OECD sponsored and aborted MAI efforts failed to respond to such concerns.<sup>39</sup> A future Multilateral Agreement on Investment is expected to correct the balance between the pursuit of economic and development objectives of States through foreign investment and global environmental protection objectives.<sup>40</sup>

Further, it has to be noted that under the auspices of UN Economic and Social Commission for Asia and the Pacific ("ESCAP"), the energy issues have lately gained great attention in the region. The ESCAP High-level Regional Meeting on Energy for Sustainable Development adopted two important documents such as<sup>41</sup>:

- (1) the Sustainable Energy Development Action Programme, Strategies and Implementation Modalities for the Asian and Pacific Region, 2001–2005<sup>42</sup>; and
- (2) the Bali Declaration on Asia-Pacific Perspectives on Energy and Sustainable Development.<sup>43</sup>

The former proposes specific activities, strategies and implementation modalities to be undertaken in order to attain sustainable energy development path, and the latter contains eight priority areas of particular concern to the Asia and Pacific region such as accessibility of energy, renewable energy, rural energy, energy efficiency, mobilisation of financial resources, technology transfer, market reform and energy pricing, and international and regional co-operation and assistance. These will be at best good guides and mandate for action at the national, sub-regional, regional and international levels for years to come. The role of ESCAP for regional energy co-operation in Asia Pacific is considered crucial. As a recent Briefing Paper on Energy Activities of the United Nations notes:

"As there is no regional or international agency that covers the entire region to deal with energy matter,

31 See generally, Ben Boer, *et al.*, *International Environmental Law in the Asia Pacific* (Kluwer Law International, 1998), esp. Chap.16; *State of the Environment for Asia and the Pacific* (Economic and Social Commission for Asia and the Pacific, Bangkok, ESCAP, 1990).

32 See Iwona Rummel-Bulska and Seth Osafo (eds), *Selected Multilateral Treaties in the Field of the Environment* (Vol.2) (Grotius Publications, Cambridge University Press, 1994), p.35. See also at: [www.sedac.ciesin.org/entri/texts/asean.natural.resources.1985](http://www.sedac.ciesin.org/entri/texts/asean.natural.resources.1985).

33 See ICSID, *Bilateral Investment Treaties 1959–1996* (1997); United Nations Conference on Trade and Development (UNCTAD), *Bilateral Investment Treaties in the Mid-1990s*, UN Doc. UNCTAD/ITE/IIT/7, UN Sales No.E98.II.D.8 (1998). See also generally, Kenneth J. Vandeveld, *United States Investment Treaties: Policy and Practice* (Kluwer, 1992); Rudolf Dolzer and Margrete Stevens, *Bilateral Investment Treaties* (1995).

34 See generally, Eric Neumayer, *Greening Trade and Investment: Environmental Protection Without Protectionism* (Earthscan Publications Ltd, London, 2001), Part Two, pp.39–99; D. Campbell (ed.), *Environmental Regulation, Its Impact on Foreign Investment* (Graham & Trotman/Nijhoff, London, 1992).

35 See B.M. Hartman, *Selected Environmental Issues in the Oil and Gas Industry: The United States' Regulatory Perspective* (Graham & Trotman, 1990); N. Steen (ed.), *Sustainable Development and the Energy Industries* (Royal Institute of International Affairs, London, 1994).

36 "North American Free Trade Agreement between the Government of the United States of America, the Government of Canada and the Government of the United Mexican States, December 1992", reprinted in (1993) 32 I.L.M. 289.

37 See [www.encharter.org](http://www.encharter.org).

38 See A.F.M. Maniruzzaman, "Towards Regional Energy Co-operation in the Asia-Pacific: Some Lessons from the Energy Charter Treaty" in (2002) *Journal of World Investment*, Vol.3, issue No.6, pp.1061–1122; David Hunter and Stephen Porter, "International Environmental Law and Foreign Direct Investment" in Daniel D. Bradlow and Alfred Escher (eds),

*Legal Aspects of Foreign Direct Investment* (Kluwer Law International, 1999), pp.186–188.

39 See generally, J. De Pencier, "Lost Opportunity—The Multilateral Agreement on Investment and the Environment" in (1998) 3 *Environmental Law* No.2; Peter T. Muchlinski, "The Rise and Fall of the Multilateral Agreement on Investment: Where Now?" in (2000) 34 *The International Lawyer* No.3, p.1033; Nii Lante Wallace-Bruce, "The Multilateral Agreement on Investment—An Indecent Proposal and Not Learning the Lessons of History" in (2001) 2 *Journal of World Investment* No.1, p.53; Sol Picciotto, "A Critical Assessment of the MAI" in Sol Picciotto and Ruth Mayne (eds), *Regulating International Business: Beyond Liberalisation* (Macmillan Press Ltd, 1999), p.82; David Hunter and Stephen Porter, "International Environmental Law and Foreign Direct Investment" in Daniel D. Bradlow and Alfred Escher (eds), *Legal Aspects of Foreign Direct Investment* (Kluwer Law International, 1999), pp.188–190.

40 See generally, Raymond Cléménçon, "Foreign Direct Investment and Global Environmental Protection: Why Environmentalists should favour Multilateral Investment Rules" in (2000) 1 *The Journal of World Investment* No.1, p.199.

41 See United Nations ECOSOC, "Economic and Social Commission for Asia and the Pacific: Report of the High-Level Regional Meeting on Energy for Sustainable Development" (Annex I and Annex II, respectively) E/ESCAP/MESD/Rep. of December 14, 2000.

42 *ibid.*, E/ESCAP/MESD/2.

43 *ibid.*, E/ESCAP/MESD/3.

ESCAP will continue to play a catalytic role in the promotion of regional co-operation in the field of energy in partnership with other sub-regional energy agencies, such as the ASEAN Energy Centre, Asia-Pacific Energy Research Centre, South Asia Association for Regional Co-operation and the (Pacific) Forum Secretariat."<sup>44</sup>

In the APEC region, even on the national level where there is comprehensive environmental legislative arrangement in some respects or a general legal framework for environmental regulation in place, due to the lack of enforcement or governmental commitment it does not bear any fruit.<sup>45</sup> A recent ESCAP report, entitled "Environmental Governance for Sustainable Development in Asia and the Pacific" (2002), has also confirmed this position.<sup>46</sup> In some developing countries despite such comprehensive legislative provision for environmental regulation, inefficacy of its application may be attributed to many other factors such as corruption of government officials, lack of political will of the corrupt government, people's non-co-operation, local conditionalities, etc. Nigeria and China are good examples in this respect.<sup>47</sup> Furthermore, environmental legislation in a country may not be enough to deal with environmental issues if international petroleum agreements in that country do not specifically provide to that effect. The offending oil

companies under such an agreement might claim that environmental regulatory aspects are not contractual, *i.e.* part of the agreement, especially when the governing law of the agreement concerned is not the law of the host State.

#### IV. What can be done?

There is no doubt that environmental legal regime concerning exploration and exploitation of energy resources in many developing countries of the Asia-Pacific region remains an elusive phenomenon. This sense pervades the whole spectrum of environmental regulation concerning energy and natural resource development throughout the developing world, let alone the developing countries of Asia Pacific. In the above discussion, it has been noted that no where in the developing world is the sustainable development of energy adequately and effectively regulated by international treaties, national laws or international energy and natural resource development agreements. Even though there have been some recent adequate legislative measures in some countries to deal with the matters, due to the lack of political will of the governments concerned, their failure to put in place effective mechanisms to implement those measures and, above all, corruption of government officials no noticeable progress has so far been made. In the circumstances, recently there have been emerging trends of certain alternative approaches to deal with the issues of sustainable development of energy and natural resources. Where the government fails the people in their expectation of sustainable development, such alternative approaches tend to prove effective safeguards towards that purpose. In the following discussion we shall briefly evaluate those approaches.

#### Public participation in environmental protection and sustainable development

Recently, there appears to be a growing trend of public participation in the protection of the environment where government has failed to ensure sustainable development of energy and natural resources.<sup>48</sup> This is not only a fact of life in the developed world, it is also gaining ground in the developing world with the aid of non-governmental organisations and the international civil society, including the national one, generally.<sup>49</sup> An economic development project whether it is in the form of exploration or exploitation of energy or natural resources or in any other form, may have serious environmental impact on the area where such activities take place and on the people who live there.

44 "Briefing Paper on Energy Activities of the United Nations" (at p.5) by the Ad Hoc Inter-Agency Task Force on Energy (prepared for the second session of the Ad hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development, February 26 to March 2, 2001), available at: [www.johannesburgsummit.org/html/documents/documents](http://www.johannesburgsummit.org/html/documents/documents).

45 See C.P. Andrews-Speed and Zhiguo Gao, "China's Petroleum Legal Regime for Foreign Participation in Upstream Operations: The Foreign Oil Company's View" in (1996) 14 J.E.R.L. No.2, p.170. See also Z. Gao in (2001), 36 Texas Int'l. L. J. No.1, p.42; David D. Peng, "China's Petroleum Industry: Oil and Gas Development Policy and Legislation" in Thomas Wälde and George K. Ndi (eds), *International Oil and Gas Investment: Moving Eastward?* (Graham & Trotman/Martinus Nijhoff, 1994), pp.107-108; Mitchell A. Silk, "Investing and Doing Business in China: The Environmental Implications" in Michael J. Moser (ed.), *Foreign Trade, Investment, and the Law in the People's Republic of China* (2nd ed., Oxford University Press, 1987), pp.402-426.

46 See at: [www.unescap.org/enrd/](http://www.unescap.org/enrd/). The report notes: "Since the adoption of Agenda 21, significant progress has been made which includes the updating of environmental laws and the introduction of new ones, the establishment of new institutions for environmental governance, the formulation of national environmental strategies including national Agenda 21. Most countries in the region now have agencies entrusted with the task of environmental management. [...] Despite these developments . . . the environmental trends are continuing to deteriorate. This is not for want of awareness or the lack of desire to do something, but as a corollary to past shortcomings in environmental governance." (p.43). See also the ESCAP-ADB publication: *The State of the Environment in the Asia and the Pacific* (2000), available at: [www.unescap.org/enrd/environment/SEO](http://www.unescap.org/enrd/environment/SEO).

47 See generally, E.O. Nwosu, "Petroleum Legislation and Enforcement of Environmental Laws and Standards in Nigeria" in (1998-1999) *Nigerian Judicial Review* 80-108; M.T. Okorodudu-Fubara, "Statutory Schemes for Environmental Protection in the Nigerian Context: Some Reflections of Legal Significance for the Energy Sector" in (1996) *Nigerian Current Law Review* 1-39; N.J. Trenton and Asmara, *Ogoni's Agonies: Ken-Saro-Wiwa and the Crisis in Nigeria* (Eritrea, Africa World Press Inc, 1998); Z. Gao in (2001) 36 Texas Int'l. L. J. No.1, p.42; David D. Peng, "China's Petroleum Industry: Oil and Gas Development Policy and Legislation" in Thomas Wälde and George K. Ndi (eds), *International Oil and Gas Investment: Moving Eastward?* (Graham & Trotman/Martinus Nijhoff, 1994), pp.107-108.

48 See generally, Donald N. Zillman, Alastair R. Lucas and George (Rock) Pring (eds), *Human Rights in Natural Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford University Press, 2002); Alan Boyle and Michael Anderson (eds), *Human Rights Approaches to Environmental Protection* (Clarendon Press, Oxford, 1996).

49 *ibid.* See also generally, Abram Chayes and Antonia Handler Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Harvard University Press, Cambridge, 1995), Chap.11; Holly Cullen and Karen Morrow, "International Civil Society in International Law: The Growth of NGO Participation" in (2001) 1 *Non-State Actors and International Law* No.1, p.7.

It may even be the fact that the locale of the project and its people may not derive any economic or any other benefit from such project, the environmental burden and the social cost could be only in their lot. And from them they will be inherited by their posterity. Now, with the ever-increasing movement for public participation in the developmental decision-making, a new glimmer of hope for the environmentally oppressed people seems to have dawned on the horizon.

While the concept of public participation has not been precisely and conclusively defined so far, it increasingly appears to confirm what it implies. One scholar thus notes:

“Increasingly, however, public participation is coming to mean, at least, that members of the public have a right to gather information about major developments from government and the developer, and that they have a right to participate in the legislative and administrative proceedings that consider the propriety of the project, and that they have an ‘access to justice’ that reflects an ability to bring questions about the project to an independent judiciary.”<sup>50</sup>

Over the last few decades, a wide range of international environmental law and international human rights law instruments, and international development financing practice have consistently established “three pillars” of public participation, such as<sup>51</sup>:

- (i) access to information;
- (ii) public participation in decision-making; and
- (iii) access to justice.<sup>52</sup>

The three pillars are meant to be an integral whole of the concept of public participation, and not either one or the other. In particular, Art.16(2) of the ASEAN Agreement on the Conservation of Nature and Natural Resources 1985 provides that States “shall, as far as possible, organise participation of the public in the planning and implementation of conservation measures”.<sup>53</sup> The Agreement also requires State parties to “circulate as widely as possible information on the significance of conservation measures and their relationship with sustainable development objectives”.<sup>54</sup>

50 Donald N. Zillman, “Introduction to Public Participation in the Twenty-first Century” in Zillman, Lucas and Pring (eds), *op. cit.* (2002), p.2.

51 See George (Rock) Pring and Susan Y. Noé, “The Emerging International Law of Public Participation Affecting Global Mining, Energy, and Resources Development” in Zillman, Lucas and Pring (eds), *op. cit.* (2002), p.11.

52 It is noteworthy that recently the Permanent Court of Arbitration, based in the Hague, the Netherlands, has adopted PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and / or the Environment (June 19, 2001) and PCA Optional Rules for Conciliation of Disputes Relating to Natural Resources and/or the Environment (April 16, 2002). Both the Optional Rules are now available for the use of all parties who agree to use them. States, inter-governmental organizations, non-governmental organizations and private entities/parties can have recourse to them when they agree to seek resolution of controversies concerning environmental protection or conservation of natural resources. See at: [www.pca-cpa.org/EDR/](http://www.pca-cpa.org/EDR/).

53 See at: [www.sedac.ciesin.org/entri/texts/asean.natural.resources.1985](http://www.sedac.ciesin.org/entri/texts/asean.natural.resources.1985). See also Iwona Rummel-Bulska and Seth Osafo (eds), *Selected Multilateral Treaties in the Field of the Environment* (Vol.2) (Grotius Publications, Cambridge University Press, 1994), p.35.

54 Art.16(2).

Thus the aforementioned ‘three pillars’ of public participation are increasingly making their way from soft-law instruments into the hard-law domain. Most recently, the United Nations/Economic Commission for Europe Convention on Access to information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the “Aarhus Convention”), adopted on June 25, 1998<sup>55</sup> has, as the title itself suggests, further articulated the aspects of public participation. The Aarhus Convention, considered by many as a landmark environmental agreement, will not only provide the guiding light on the matters of public participation in the European Community, it will also shape ideas in the field in the rest of the world.<sup>56</sup> More importantly, a recent spate of public pressure and public participation in environmental protection in the petroleum, mining and natural resource sectors in some developing countries have brought about some tangible effect on the sustainability of the notion of sustainable development of energy and natural resource development. Thus, for instance, public participation or concerted actions of the Ogoni people against Shell oil company in Nigeria,<sup>57</sup> of the Ok Tedi People in Papua New Guinea against the Ok Tedi Mining Ltd/the Broken Hills Proprieties Co Ltd (BHP), an Australian international mining company,<sup>58</sup> and of the local community in Ecuador against Texaco<sup>59</sup> for environmental degradation have set a benchmark to emulate elsewhere in the Third World. Public participation empowers people and gives voices to the voiceless and also the right to be heard. For the protection of the environment and sustainable development of energy, it seems to be an effective weapon when government proves to be part of the problem rather than solution to the crisis of environmental degradation. This notion of public participation, being an instrument for the realisation of the legitimate expectation of people, is perhaps an emerging concept of the Law of Peoples—a new branch of law advocated by John Rawls—under which people are united by common sympathies.<sup>60</sup> However, a caveat must be made that although public participation is gaining ground in some countries, there are many parts of the developing world, including the territories of indigenous peoples, where, because of abject poverty, lack of education, suppression of the

55 (1999) 38 I.L.M. 517.

56 See Peter Davies, “Public Participation, the Aarhus Convention, and the European Community” in Zillman, Lucas and Pring (eds), *op. cit.* (2002), p.155.

57 Yinka Omorogbe, “The Legal Framework for Public Participation in Decision-making on Mineral and Energy Development in Nigeria: Giving Voices to the Voiceless” in Zillman, Lucas and Pring (eds), *op. cit.* (2002), p.549. See also generally, Shehu Abdullahi, *The Critical Analysis of Nigeria's Upstream Oil Industry: Current Issues, Crisis of Environmental Regulation, and the Dilemma of the Multinational Oil Industry* (unpublished PhD dissertation, Glasgow Caledonian University, 2002), Chap.7.

58 Zhiguo Gao, George Akpan and Jim Vanjik, “Public Participation in Mining and Petroleum in Asia and the Pacific: The OK Tedi Case and Its Implications” in Donald N. Zillman, Alastair R. Lucas and George (Rock) Pring (eds), *Human Rights in Natural Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford University Press, 2002), p.679.

59 See *Texaco Boycott Urged*, at: [www.biocoq.uthscsa.edu/natnet/archive/nl/9309/0151](http://www.biocoq.uthscsa.edu/natnet/archive/nl/9309/0151).

60 See John Rawls, *The Law of Peoples* (Harvard University Press, Cambridge, 1999), esp. pp.23–30.

media, and lack of awareness of people's rights, the notion has not received any momentum. The international civil society has an important role to play in this regard.

### The global environmental responsibility of the multinational's home State

It has to be appreciated that environmental degradation in the Amazonian rain forest may have devastating impact on the global environment. Thus environmental havoc in one part of the world could be a great concern for the rest of the world. In many cases it is found that the activities of multinational enterprises ("MNEs"), based in developed countries, may lead to environmental degradation in many parts of the world, which may be due to the lack of effective regulation and control of their activities. In many developing countries, the lax environmental regulation, *inter alia*, could be a good incentive for multinational's relocating industries and factors of production from the developed countries with the higher environmental standards.<sup>61</sup> For instance, recently many United States' multinationals have recently shifted their businesses from the United States to Mexico because of her lax environmental regulation.<sup>62</sup> In the circumstances, for the greater good of the global community, the home State of the multinationals polluting the environment should take the responsibility for their activities in foreign countries. The home States' higher regulatory standards for environment could be extraterritorially applied to the operations of their multinationals elsewhere. It is encouraging that such extraterritorial effect of the United States laws is given to combat business corruption, transnational frauds, money-laundering and drug trafficking to achieve laudable goals. In the future, when the multinationals' home States' higher environmental standards are extraterritorially and strictly applied to their foreign operations, it will drive the devil away from the so-called pollution havens for a better tomorrow.

It must be mentioned that some developed countries seem to appreciate that they have an important role to play to minimise their environmentally damaging behaviour. The British Government recently in its White Paper on International Development, entitled

"Eliminating World Poverty: Making Globalisation Work for the Poor" (2000),<sup>63</sup> has expressed its commitment to tackle global environmental problems and has delineated various policy options and measures.<sup>64</sup>

### Environmental insurance

The provision for insurance of the risk of environmental degradation or damage to the environment could be an effective weapon against the multinational company's reckless and environmentally harmful activities. This could redress to some extent the sufferings of the environmentally oppressed and affected people. Unfortunately, there does not seem to be any notable practice in this respect, nor any legislative or contractual initiative to address this issue in the developing world. However, there still remains a great prospect of such insurance measures for the protection of the environment and sustainable development of energy resources. It needs to be explored in the future as one of the protective measures against all sorts of environmental ills.

## V. Concluding remarks

The issues of sustainable energy development in the Asia-Pacific region, like any other region, is not going to go away overnight. This is a big challenge for the Third World in the twenty-first century. While aspiring for development, the developing countries have to grapple with the protection of the environment. It has to be realised that in the context of global environment it is not only a particular country, where a development project operates, which is the environmental stakeholder, it could be the international community as a whole. On the global level, if each environmental stakeholder, whether it be the host State, the home State of the multinational, international civil society or peoples, actively plays their role individually as well as collectively for the protection of the environment, there is a chance for sustainable development of energy and natural resources in the Third World developing countries. If the whole world is considered a global village, the global community must take responsibility for the environment for the common good for all. The approaches, alternative to environmental regulation, that we have highlighted above are not only useful to the Asia-Pacific developing countries but also to the rest of the Third World as the safeguard measures against environmental damage or degradation.

61 G.S. Eskeland and A.E. Harrison, "Moving to Greener Pastures? Multinationals and the Pollution Haven Hypothesis" in (1997) *Working Paper* 1744, Washington, DC, World Bank. See also Eric Neumayer, *Greening Trade and Investment: Environmental Protection Without Protectionism* (Earthscan Publications Ltd, London, 2001), Chap.3.

62 See N. Mabey and R McNally, "Foreign Direct Investment and the Environment: From Pollution Havens to Sustainable Development" (World Wide Fund for Nature, Surrey, 1999).

63 Presented to Parliament by the Secretary of State for International Development by Command of Her Majesty, December 2000 (Cm. 5006), available at: [www.globalisation.gov.uk](http://www.globalisation.gov.uk).

64 *ibid.* See Chap.6.