

LTP Project Proposal for the Third Phase

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I. Overall LTP Programme

1. LTP Overall Context

(1) IGES is more than a research organisation. It should be an organisation to bridge gaps between policy development and research findings. In this sense, IGES is a do-tank with its focus upon public policies for sustainable development.

(2) IGES is an international institute. Its scope should be beyond Japan. Its main focus should be on developing countries in Asia and the Pacific.

(3) IGES should be effective in delivering results according to the overall policy needs of the region. Its management and operations should be flexible enough for quick and effective delivery. There should not be any bureaucratisation to prevent effective delivery, and

(4) IGES should utilise its own assets to meet its objectives. IGES's assets include: its convening power, close relationship with governments, international organisations and research institutes in the region, secure research funds, and its multinational research staff. These assets should be fully utilised.

2. Functions of LTP

(1) Functions of LTP are broadly defined as those related to long-term and cross-sectoral issues. The following is an attempt to define them more specifically, taking into account, among other things, the basic features of IGES as outlined above, and LTP's relationship with other projects within IGES.

(2) LTP identifies the following three as the basic functions of LTP: (i) targeted policy research; (ii) strategisation, and (iii) mobilisation. Given the features of IGES above, these functions should go beyond one phase, and should be maintained over many years to come. They are in fact equal to the mandates of LTP within IGES.

(3) Some issues/agendas are brought up from the bottom, i.e. from research to mobilisation, while other issues/agendas are handed down from the top, i.e. from mobilisation to research. Thus, the relationship among the three functions is not one way. There are always two-way interactions between the three. They are mutually reinforcing.

2-1 Targeted Policy Research

(1) LTP, in principle, handles cross-sectoral issues. They should be addressed on a basic level by other IGES projects. LTP should handle mainly underlying principles of sustainable development that cut across issues covered by other projects.

(2) Sustainable development is commonly divided into three distinctive aspects i.e. those related to economic, social and environmental.

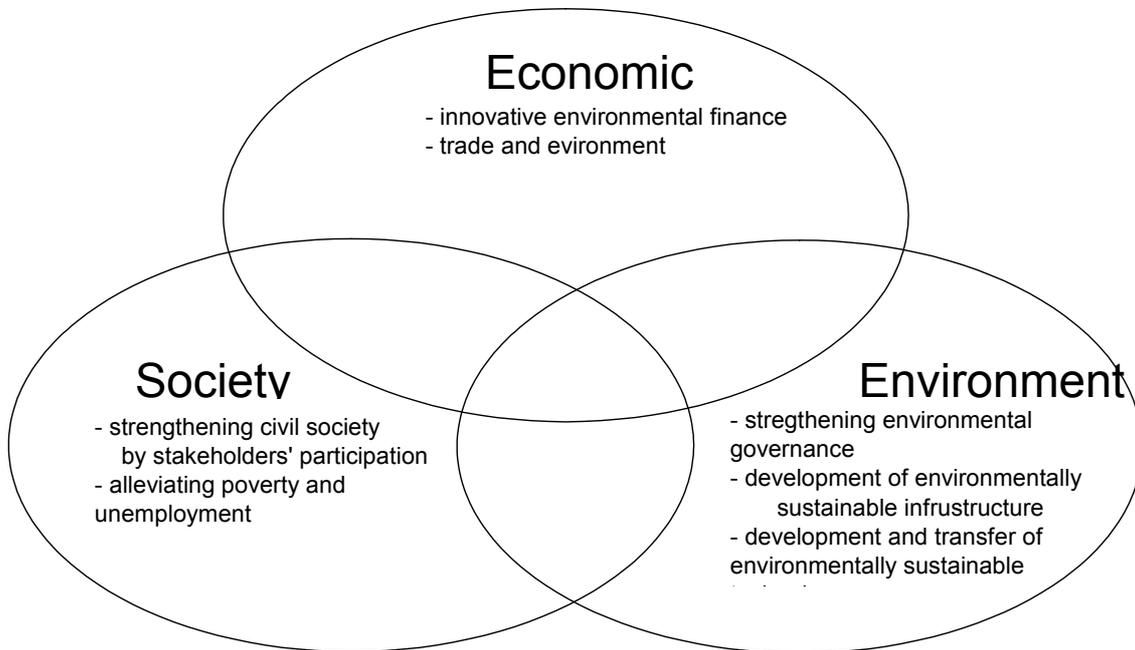
The following key factors are identified to broadly define the long term focuses of LTP under the three aspects as shown in Fig.1.

a) Environmental aspect: As environmental issues turn into a major social concern of the world, and as more and more stakeholders get involved, a core environmental management becomes essential. This involves environmental policies, strengthening environmental governance, development and transfer of environmentally sustainable technologies, development of environmentally sustainable infrastructure, introducing performance reviews, and creating enabling policy environments.

b) Social aspect: It is important to address key social issues if proposed environmental policies are to be put into practice. Issues such as strengthening of civil society groups, stakeholders' participation, poverty, unemployment, and social equity need to be examined so that negative social impacts could be alleviated at least to politically acceptable levels when new environmental policies are considered.

c) Economic aspect: As the environment agendas emerges as one of the mainstream issues, integration with the economy becomes important. Issues related in this respect include, among other things, innovative environmental finance, trade and environment, and economic implications of environmental policies.

Fig.1 Key aspects and factors of LTP's Research



3) LTP's research should be conducted keeping in mind the perspectives of developing countries. Mere emulation of what has been practiced in developed countries should be avoided. Constructive studies based upon opportunities and constraints existing in developing countries in the region should be promoted. Thus, collaboration with strategic research institutes in developing countries of Asia-Pacific region is essential in conducting targeted policy research.

4) Targeted policy research will have several topics for each phase. Global and regional policy priorities will be the main factors in determining those topics.

5) Databases on good practices and strategic policy options being developed under the current research (i.e. RISPO and APFED) will be important assets for LTP. The databases continue to be strengthened over the next phase.

2-2 Strategisation of research findings

(1) The findings of research themselves cannot directly reach policy makers. A process of translation is always necessary to make such findings politically relevant. An excellent example of this type of process is the IPCC. Results of various climate change studies are critically assessed and essential recommendations are proposed for policy deliberations. It is important to recognise that IGES is already very much committed to this process by accommodating the TSU/IPCC.

(2) IGES has already developed networks of research institutes in Asia and the Pacific. Quite a few are signatory institutes of IGES, and others are partners of individual IGES research projects. Drawing upon such networks, LTP should initiate a process to strategise the findings of policy

research for the Asia-Pacific region.

(3) The strategisation process will be participatory. A peer review system should be introduced. The process will involve not only projects within IGES but also collaborating institutes both in and outside of the region, private companies, and research oriented NGOs.

2-3 Mobilisation of Research Findings

(1) Sensible policies can be formulated only when the right inputs are made on the right subjects at the right time, through the right political channels. This is true even with most strategic policy recommendations. Thus, it is essential for IGES to be always closely associated with key regional/sub-regional political processes to contribute to sustainable policy development for the region.

(2) Fortunately, IGES has been involved in several political processes, both formal and informal. Such processes include, as far as LTP is concerned, the ECO-Asia, APFED, the ESCAP Ministerial Conference on Environment and Development, the WSSD process, and collaboration with UNEP/ADB. These processes should be utilised to the maximum extent as opportunities for IGES to make contributions to sustainable policy development.

II. Achievements of the Second Phase

The Long-Term Perspective and Policy Integration Project (LTP), in consultation with other IGES projects, conducted policy analyses focusing on: 1) cross-sectoral integration and long-term perspectives; 2) contributing to international dialogues on sustainable development in the Asia-Pacific region, and 3) addressing pressing issues in the region. It must be mentioned that LTP was able to successfully present its outcomes at WSSD held in Johannesburg in 2002.

1. Research on Innovative and Strategic Policy Options (RISPO)

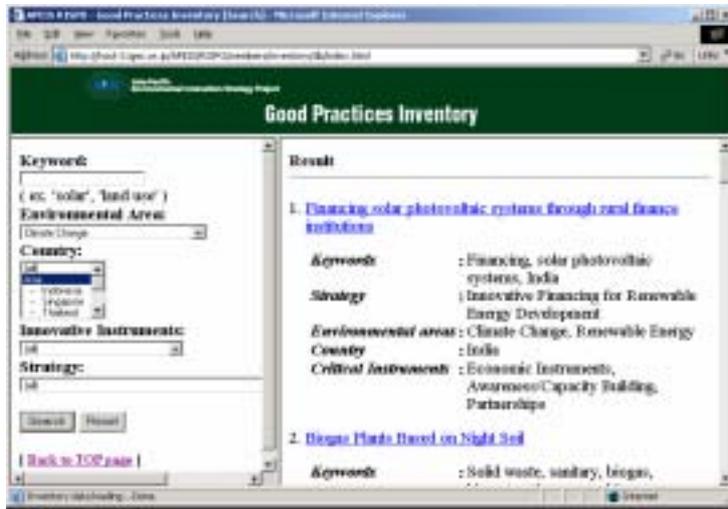
RISPO is a sub-project of the “Asia-Pacific Environmental Innovation Strategy Project (APEIS)”. LTP established a collaborative network with other IGES projects and relevant research institutes in the Asia-Pacific region, and conducted the eight (8) sub-theme projects as below.

The Good Practices Inventory and Strategic Policy Options are the two major products of RISPO. LTP, together with the collaborating research institutions such as TERI, ERI, and TEI, collected and analysed good practices from target countries in accordance with the selected research themes above, and aims at developing a prototype Good Practices Inventory as shown below.

The inventory is designed to help overcome the lack of information on such practices in the region. It will serve as a storehouse of accumulated experiences and a platform for information sharing and dissemination. One hundred and four (104) cases of good practices collected were put on the RISPO’s website as shown in Fig.2. Fig. 3 shows the geographical distribution of good practices collected during the first two years.

Category of Innovation	Sub-research themes	Countries studied
Economic Instruments	Innovative financing for renewable energy development	China, Fiji, India
	Improving environmental performance of small and medium-sized enterprises (SMEs)	India, Thailand
	Creation of inter-boundary market for recycled materials	Japan, Philippines, Thailand
Physical Instruments	Development of environmentally sustainable transport systems in urban areas	China, Japan, Thailand
	Promotion of biomass energy use	India, Thailand
Social Instruments	Involvement of communities in nature-based tourism	Indonesia, Japan
	Promotion of environmental education by NGOs	Indonesia
	Sharing of local/indigenous knowledge and practices	Bangladesh, Hong Kong, India, Nepal Thailand

Fig. 2 Website of Good Practices Inventory



<http://www.iges.or.jp/APEIS/RISPO>

Asia-Pacific Environmental Innovation Strategies (APEIS)
 Research on Innovative and Strategic Policy Option (RISPO)
 Good Practices Inventory

Using a market-oriented institutional and financial model for decentralised solar systems

Summary of the Practice

Keywords: financing, solar photovoltaic systems, India
Strategy: Innovative Financing for Renewable Energy Development
Environmental areas: Climate Change, Renewable Energy
Country: India
Critical Instruments: Economic Instruments, Awareness/Capacity Building, Partnerships

Keywords: recharging, on-site biogas, energy service network
Strategy: Innovative financing for renewable energy development
Environmental areas: Climate change, Ecosystem and biodiversity conservation
Critical Instruments: Awareness/capacity building, Organizational management, Technology
Country: India
Location: Hikkari, Rajasthan and Dehra Dun, Uttarakhand
Partnership: TERI, Manav Seva Ashram, Society for Motivational Training and Action (SMTA), Sri Jagdamba Samiti (SJS), local enterprises, and village community
Duration: 1999–ongoing
Funding: India Canada Environment Facility, local enterprises

Background:
 Hikkari is one of the districts located in the Thar Desert region. The remote villages and hamlets of the desert area have very limited access to traditional sources of energy, and village communities are heavily dependent on biomass for cooking, their lighting and industrial requirements. Climate is dry.

Fig. 3 Distribution of Good Practices – The Asia-Pacific Region

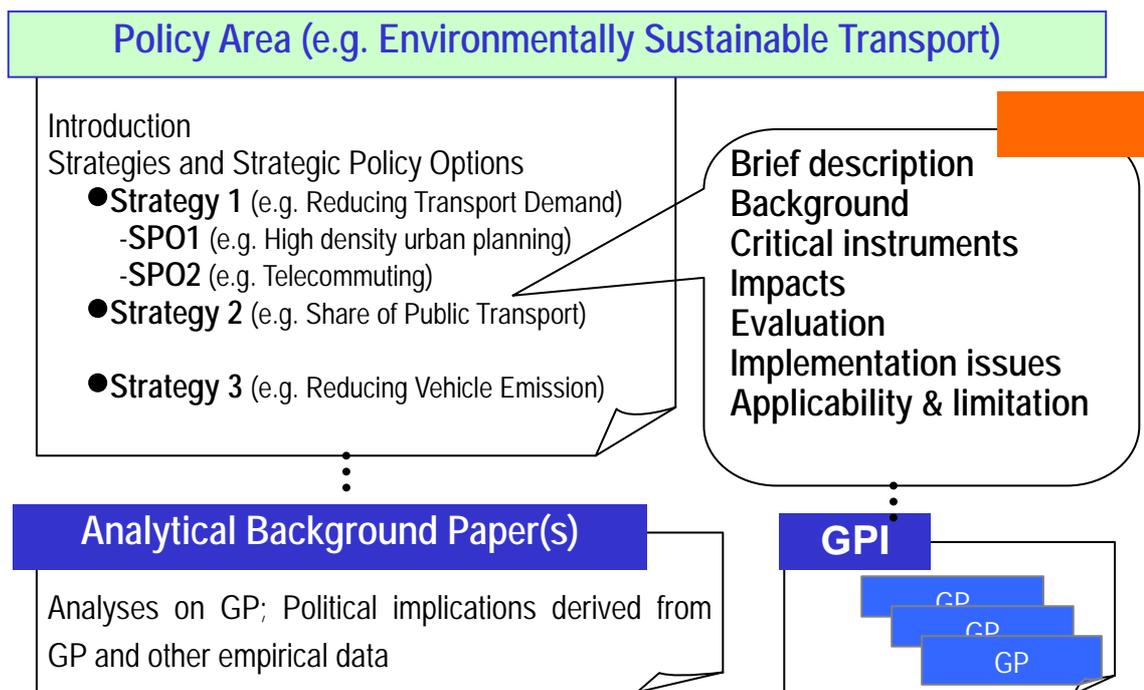


In addition to collection of the good practices, strategic policy options identified by analysing, among other things, good practices in the region have been compiled in a database. The primary target of the database is policy-makers at local, national, sub-regional and regional levels.

The major progress regarding the *Strategic Policy Options (SPOs)* was the development of the framework of SPOs and the format of SPO common to the eight sub-themes through the discussions at research team meetings and the RISPO Plenary Workshop. Based upon the common framework and format, SPO frameworks have been developed for each sub-theme and some SPOs have been developed. Each SPO contains information such as brief description, background, critical instruments, impacts, evaluation, implementation issues, and applicability limitation (Please see Fig. 4).

The established databases will be linked to other related databases including that being developed under the APEIS/IEA project, the Best Policy Practices Database of APFED and others.

Fig. 4 Common Framework of Strategic Policy Options



2. Asia-Pacific Forum for Environment and Development (APFED)

As the APFED secretariat, LTP has supported the organisation of the four APFED Substantive Meetings, respectively held in January 2002, in Thailand; May 2002, in Indonesia; January 2003, in China; and August 2003, in Mongolia, as well as APFED multi-stakeholder and expert meetings. Research input provided as background reports to the above mentioned meetings included the following papers:

- 「Sustainable and environmentally sound land use in rural areas with special attention to land degradation」 January 2003;
- 「Urbanization, Urban Environment and Land Use: Challenges and Opportunities」 January 2003;
- 「Water for Sustainable Development in Asia and the Pacific」 January 2002;
- 「Renewable Energy for Sustainable Development in Asia and the Pacific」 January 2002;
- 「Issues and Future Perspectives in Trade and Sustainable Development in Asia and the Pacific」 January 2002; and
- 「Issues and Challenges in the Financing of Sustainable Development in Asia and the Pacific」 January 2002.

Furthermore, LTP as the secretariat of APFED have assisted in preparing a couple of draft documents of the APFED Final Paper, taking into account discussions at APFED preliminary meetings, expert meetings and multi-stakeholder meetings. The current draft has contained about 100 recommendations and further refinement will be made in the next ten (10) months.

On the basis of deliberations in the APFED meetings, the APFED Message was submitted to the World Summit on Sustainable Development in the year 2002. The APFED Message was registered as a partnership initiative of the WSSD. The initiative included developing a network of knowledge and capacity building activities. In that respect LTP has been developing an inventory of Best Policy Practices (BPPs). Ninety fives BPPs had been collected and included in the database, which will be launched on the internet in due course (Please see Table 1).

Table 1 Statistical Summary of BPPs for the Prototype of the BPP Database.

Category	APFED	Secretariat	TOTAL
Freshwater	20	5	25
Renewable Energy	6	1	7
Urbanization	36	4	40
Chemicals	7	7	14
Oceans	9	8	17
Others	1	6	7
Total	79	31	110
Repeated BPPs			-15
TOTAL			95

Since November 2003, the APFED Secretariat has been preparing the prototype of the BPP Database, which enables all policymakers and environmental practitioners in the Asia-Pacific, as well as those in other regions, to read stories and learn lessons from the practices recommended by the APFED Members and the Secretariat.

The website to be established for the BPP and CBP databases host the databases themselves, accompanied by a bulletin board intended to encourage the registered users to exchange information and discuss the issues associated with sustainable development. Users can use single or multiple keywords in the keyword search function. Advanced searching is made possible by combining this with other search functions as pull-down menus. The keyword search function extracts all BPPs in the dataset that contain the keywords. In addition, the pull-down menus allow users to specify the required information from the lists of sectoral/cross-sectoral issues, actors involved, and innovative instruments. The database also allows users to search BPPs by country and region (Please see Fig.5).

Fig.5 Image Views of the BPP Database

<BPP Home>

The screenshot displays the APFED Best Policy Practice Database interface. At the top, there is a banner with the APFED logo and the text "Best Policy Practice Database". Below the banner, there are navigation links: "Home", "Database", "BPP", "Result", and "Detail". The main content area shows a detailed view of a policy practice entry. The entry is titled "Rainwater Harvesting and Utilization in Urban Areas" and is located in Japan, Sumida Ward, Tokyo. The entry was created in 1997 and is ongoing. The contact person is Dr. Makoto Muraoka, Chief, Environmental Promotion Section, Department of Environmental Protection, Sumida Ward, located at Sumida City Hall, 1-23-10 Azumabashi, Sumida-ku, Tokyo 130-8540, JAPAN. The contact information includes a telephone number (3-5605-6209), a fax number (3-5605-6934), and an email address (mailto:info@apfed.org). The funding section indicates that the costs are covered by the facility owners, with a subsidy program set up by the ward in 1999. The actions involved include local government and private sector organizations. The section on background and objectives describes the ward's history of flooding and the implementation of a rainwater harvesting and utilization program to change the city's relationship with the natural water cycle. Activities include the production of rainwater utilization facilities for public facilities, private housing, businesses, and communities, and the use of stored rainwater for various purposes like flushing toilets and air conditioning.

Title	Rainwater Harvesting and Utilization in Urban Areas
Country	Japan
Area	Sumida Ward, Tokyo
Province	
Duration/year	1997 - ongoing
Name	Dr. Makoto Muraoka, Chief, Environmental Promotion Section
Affiliation	Department of Environmental Protection, Sumida Ward
Address	Sumida City Hall, 1-23-10 Azumabashi, Sumida-ku, Tokyo 130-8540, JAPAN
TEL	3-5605-6209
FAX	3-5605-6934
E-mail	mailto:info@apfed.org
Funding	(1) Amount: Unstated (2) Sources of funds: Expenses associated with the installation of rainwater storage and utilization facilities are covered by the facility owners. In other words, the facilities in public buildings are financed by the Ward while individuals and local businesses cover the costs on their own. Rainwater utilization is enhanced by a subsidy program set up by the ward in 1999, which aims to further promote rainwater utilization in the municipality. Tokyo Municipal Government has also provided financial assistance (amounts unknown).
Actions involved	Local Government Private Sector Non-governmental organizations
Section A: Background & Objectives	Sumida Ward is one of the 23 wards in Metropolitan Tokyo that encompasses an area of 13.76km ² and has 235,905 residents (as of December 2001). With high rainfall and geography (the ward is surrounded by the Arakawa and Arakawa Rivers), Sumida residents have often suffered from floods but periodically had concerns an inadequate water supply. Water resource management for disaster relief was also an issue for Sumida residents. In 1923, the Great Kanto Earthquake hit Sumida Ward and 48,430 residents died in a huge fire. Again, in 1945, the ward was completely burnt by bombing raids during the Second World War. Rainwater harvesting and utilization program has been initiated in order to change the way the city interacts with the natural water cycle, leading to a more stable water supply system. Activities of rainwater harvesting and utilization include the following: (1) Introduction of rainwater utilization facilities to public facilities, private housing, businesses and communities in the ward. (2) Stored rainwater is the facilities is used to flush toilets, sprinkle gardens and cool water in air conditioning.

<Presentation of the individual BPPs>

The screenshot displays the APFED Best Policy Practice Database search interface. At the top, there is a banner with the APFED logo and the text "Best Policy Practice Database". Below the banner, there are navigation links: "Home", "Database", and "BPP". The main content area shows a search interface with a map of Asia and a list of countries. The search criteria are: Sectoral Issues: BPP, Cross-Sectoral Issues: BPP, Actions Involved: BPP, Innovative Instruments: BPP, and Keyword: (empty). The search results are displayed in a table with columns for Title, Country, Area, and Province. The first result is "Rainwater Harvesting and Utilization in Urban Areas" in Japan, Sumida Ward, Tokyo. The search interface also includes a "Search" button and a "Reset" button. At the bottom, there is a copyright notice: "All rights reserved by APFED".

3. IGES White Paper for Sustainable Development in the Asia-Pacific Region

LTP carried out preparatory work to publish, by the end of the fiscal year 2003, the IGES White Paper as an attempt to integrate research outputs of all IGES projects. A special edition of the IGES White Paper, entitled “Closing the Knowledge-Action Gap: Strategic Research for Sustainability in Asia and the Pacific” was submitted to the World Summit on Sustainable Development (WSSD). The special edition introduced on-going research projects of IGES, and outlined the forthcoming full IGES White Paper.

The proposed overall theme as well as topics for sectoral sections of the White Paper have been presented and discussed by an all-IGES meeting held on 22nd of May 2003. In addition, draft papers for the overall theme and a selected sectoral paper were presented at the 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community (IHDP) held on 16-18 October 2003 in Montreal, Canada. Both the IGES in-house and the IHDP meetings were aimed at receiving comments and feedbacks on the proposed theme and sectoral topics of the White Paper. Furthermore, consultation with all project leaders and external consultants of IGES was undertaken to discuss the proposed structure and contents as well as the dissemination strategy.

As of December 2003, draft chapter papers have been completed and are currently in the process of review. The full White Paper is expected to be finalized by the end of March 2004.

III. Sub-projects for the Third Phase

In view of the above, the major objective of LTP for the third phase is to contribute to facilitating and catalysing focused policy dialogues among key stakeholders in Asia-Pacific region, thereby strengthening the presence of IGES as a leading strategic institute in the region. More specifically LTP will implement the following three (3) sub-projects in the third phase:

(1) Integrated Policy Design on Trade, Environment and Sustainable Development in the context of Regional Economic Integration in Asia [Targeted Policy Research]: Please refer to Attachment I for full proposal.

Economic and social development in the Asia-Pacific region has been driven by export-led growth, under the multilateral trading system. Since 1999/2000, the Asia-Pacific region is experiencing a boom in regional and bilateral Free Trade Agreements (FTAs), with the result that trade regimes are increasingly taking place in the context of FTAs and regional economic integration. This current process of bilateral and regional trade agreements is expected to culminate in the creation of an East-Asian economic community by the year 2020. The East-Asian economic community would be comprised of Japan, the Republic of Korea, China, and the ten member countries of the Association of Southeast Asian Nations (ASEAN). In addition, India has concluded a Framework Agreement on Comprehensive Economic Cooperation with ASEAN, and has manifested interest in being part of the East-Asian community. The East-Asian economic community and its paving way – bilateral and regional FTAs –, as a process of economic integration through reduced barriers to trade and foreign investment, greater flow of technologies and information, is one major development that will significantly affect the region in terms of structural effects (change in the sectoral composition of countries' economy); scale effects (change in overall level of economic activity); product or composition effects (flow of products and services); technology effects (transfer of environmentally-friendly technologies or pollution haven); and regulatory effects ("locking-in" reform towards more stringent regulation or regulatory inertia)¹. These five types of effects bear crucial implications for the environment.

It is our assumption that if a country has efficient environmental policies that internalize environmental externalities, its degree of integration with other countries should not affect the state of the natural environment. However, without appropriate environmental policies and mechanisms that keep up with the above-mentioned effects of economic integration, increasing the degree of openness may exacerbate environmental degradation.

With this understanding, we plan to conduct this research from the following broad perspectives: (i) the internalisation of environmental externalities; (ii) technological innovation and cross-border flow of environmentally-sound technologies; (iii) participation of civil society and all relevant stakeholders and the strengthening of their capacities; (iv) formulation of environmental policies to

¹ This categorisation draws upon the Organisation for Economic Cooperation and Development, *Methodologies for Environment and Trade Reviews* (Paris: OECD/GD (94)103, online) and Gene M. Grossman and Alan B. Krueger (1991) "Environmental Impacts of a North American Free Trade Agreement", NBER Working Paper No. 3914, November.

address transboundary issues; and (v) formulation of policies for socially and environmentally sustainable investments. It is our belief that these principles can enable FTAs and the process towards the East-Asian economic integration to deliver economic and social benefits through economic growth, while lowering the peak in the Environmental Kuznets' Curve² in developing countries.

This research has three objectives:

- (a) To evaluate the implications of FTAs and regional economic integration for the environment
- (b) To assess the capacity of existing environmental policies and institutions to face the expected environmental effects of economic change resulting from FTAs and economic integration
- (c) To propose relevant policy instruments and mechanisms for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones

Research activities to be undertaken towards these objectives consist of five components:

- 1) Evaluation of the relevance to Asia of models in integrating environment in the context of FTAs and economic integration in Europe and North America
- 2) Evaluation of the environmental effects of FTAs and regional economic integration in Asia
- 3) Assessment of the response capacity of existing environmental policies and institutions
- 4) Policy innovation for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones
- 5) Feasibility Studies

² The Environmental Kuznets' Curve posits an inverted-U relationship between environmental quality factors and per capita income, whereby environmental quality initially worsens, eventually reaches a peak before improving, as per capita income continues to increase.

(2) Sustainable Asia 2004: Synergising Stakeholder Participation [Strategisation]: Please refer to Attachment II for full proposal.

“Synergising Stakeholder Participation” will be the theme for the first edition of “Sustainable Asia”, which is an IGES-wide project formerly known as “IGES White Paper”. This will be a report that puts together research findings from all the IGES projects under a common theme. It explores the state of, and formulates policy recommendations for, stakeholder participation in environmental management and resource conservation from the perspectives of climate change, urban environmental management, freshwater management, forest conservation, environmental education and business and the environment. The analytical framework builds on the concept of synergetic participation from three angles: vertical synergisation between stakeholders at local, national and international levels; horizontal synergisation between stakeholders cutting across geographical borders; and cross-sectoral synergisation.

“Sustainable Asia 2004: Synergising Stakeholder Participation” is managed by a team led by the LTP project and composed of representatives from all IGES projects under the guidance of the President and advice from IGES Board Members. The report is scheduled to be completed and ready for publication by March 2005.

(3) APFED Action Plan [Mobilisation]: Please refer to Attachment III for full proposal.

The Asia-Pacific Forum for Environment and Development (APFED) which was set up in the year 2001 as a forum of eminent persons on the environment and development in the Asia-Pacific region has held four rounds of substantive meetings and several experts’ and multi-stakeholders’ meetings. The result of the deliberations from these meetings was compiled in an “APFED Final Report”, which is a document that envisions the future of environment and sustainable development in the Asia-Pacific region over the next 20 years.

The APFED Action Plan is the document that formulates avenues for putting into practice policy recommendations from the APFED report, which have revealed to have a high potential for immediate implementation over the next five years. The Action Plan has three components: 1) Multi-stakeholder Interactive Mechanism, 2) Sustainable Development Knowledge Initiative, and 3) Innovative Showcases for Sustainable Development. The Knowledge Initiative consists of knowledge management. Innovation Showcases will serve as a source of innovative ideas, whereby various innovations are tried out in the field and the lessons learned through demonstration projects fed back into the Knowledge Initiative. These innovative ideas will be discussed and shared through the Multi-stakeholder Interactive Mechanisms with all concerned stakeholders in the region.

Attachment I

***Integrated Policy Design on Trade, Environment and Sustainable Development
in the context of Regional Economic Integration in Asia***

1. The policy Context

Economic and social development in the Asia-Pacific region has been driven by export-led growth, under the multilateral trading system. Since 1999/2000, the Asia-Pacific region is experiencing a boom in regional and bilateral Free Trade Agreements (FTAs), with the result that trade regimes are increasingly taking place in the context of FTAs and regional economic integration. This current process of bilateral and regional trade agreements is expected to culminate in the creation of an East-Asian economic community by the year 2020. The East-Asian economic community would be comprised of Japan, the Republic of Korea, China, and the ten member countries of the Association of Southeast Asian Nations (ASEAN). In addition, India has concluded a Framework Agreement on Comprehensive Economic Cooperation with ASEAN, and has manifested interest in being part of the East-Asian community. The East-Asian economic community and its paving way – bilateral and regional trade agreements –, as a process of economic integration through reduced barriers to trade and foreign investment, greater flow of technologies and information, is one major development that will significantly affect the region in terms of structural effects (change in the sectoral composition of countries' economy); scale effects (change in overall level of economic activity); product or composition effects (flow of products and services); technology effects (transfer of environmentally-friendly technologies or pollution haven); and regulatory effects (“locking-in” reform towards more stringent regulation or regulatory inertia)¹. These five types of effects bear crucial implications for the environment.

It is our assumption that if a country has efficient environmental policies that internalize environmental externalities, its degree of integration with other countries should not affect the state of the natural environment. However, without appropriate environmental policies and mechanisms that keep up with the above-mentioned effects of economic integration, increasing the degree of openness may exacerbate environmental degradation.

With this understanding, we plan to conduct this research from the following broad perspectives:

- The internalisation of environmental externalities
- Technological innovation and cross-border flow of environmentally-sound technologies
- Participation of civil society and all relevant stakeholders and the strengthening of their capacities
- Formulation of environmental policies to address transboundary issues
- Formulation of policies for socially and environmentally sustainable investment

It is our belief that these principles can enable FTAs and the process towards East-Asian economic integration to deliver economic and social benefits through economic growth, while lowering the peak in the Environmental Kuznets' Curve² in developing countries.

¹ This categorisation draws upon the Organisation for Economic Cooperation and Development, *Methodologies for Environment and Trade Reviews* (Paris: OECD/GD (94)103, online) and Gene M. Grossman and Alan B. Krueger (1991) “Environmental Impacts of a North American Free Trade Agreement”, NBER Working Paper No. 3914, November.

² The Environmental Kuznets' Curve posits an inverted-U relationship between environmental quality factors and per capita income, whereby environmental quality initially worsens, eventually reaches a peak before improving, as per capita income continues to increase.

2. Objectives

This research has three objectives:

- (a) To evaluate the implications of FTAs and regional economic integration for the environment
- (b) To assess the capacity of existing environmental policies and institutions to face the expected environmental effects of economic change resulting from FTAs and economic integration
- (c) To propose relevant policy instruments and mechanisms for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones

Research activities to be undertaken towards these objectives consist of five components:

Component ①: Evaluation of the relevance to Asia of models in integrating environment in the context of FTAs and economic integration in Europe and North America

- Identifying the elements of relevance to Asia from the North American and European experience. There are two main approaches to incorporating environment in FTAs or economic integration: 1) mutual recognition and enforcement of national environmental policies (the NAFTA approach) and, 2) harmonisation of environmental policies and technical standards (the approach of the European Union).

Component ②: Evaluation of the environmental effects of FTAs and regional economic integration in Asia

- Identifying major economic sectors that are potentially deteriorating factors to the environment. This would include *industry, transport, energy and agriculture* and assessing their potential impacts. Sectors to be covered will be selected taking into consideration resources of the project and possibilities of internal and external collaboration.
- Identifying environmental sectors that would be most vulnerable to the effects of economic changes induced by FTAs and economic integration and assessing the potential effects. This would include air quality, water supply, soils/agriculture, forest cover, biodiversity and waste. Sectors to be covered will be selected taking into consideration resources of the project and possibilities of internal and external collaboration.

Component ③: Assessment of the response capacity of existing environmental policies and institutions

- Reviewing and assessing the capacity of existing environmental policies and institutions to face expected environmental effects of economic change, from the broad perspectives mentioned above.
- Identifying areas where regulatory and policy adjustments are required to keep up with expected economic, social and environmental change.

Component ④: Policy innovation for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones

- Designing *ex ante* approaches and innovative “flanking” policies for offsetting anticipated negative environmental effects, from the five broad perspectives mentioned above.
- Formulating policy proposals for enhancing the positive effects of FTAs and economic integration.

Component ⑤: Feasibility studies

- Implementing pilot applications of workable innovative policies in selected areas, making use of policy assessment criteria developed under the APEIS/RISPO project. Innovative policies to evaluate will be those policies introduced on a pilot basis in designated areas such as municipalities, prefectures and provinces. Feasibility studies will be conducted within the framework of the APFED Action Plan.

3. Project design

3.1. Rationale:

It is considered that IGES, being located in Japan, a country that accounts for 45.5 percent of world's exports and 48.4 percent of imports in merchandise trade to Asia³ is in a right position to take initiative in this research subject. Moreover, during the Second Phase, the LTP project has undertaken research related to international trade in recyclable products; automotive and transportation sector; biodiversity and traditional knowledge; and eco-tourism, all areas where environmental rules and standards will have an impact on international trade. Furthermore, IGES has an already well established research network with research institutes in key trading nations in the region, in China, India and Southeast Asia as well as strong connections with related international organizations and leading research institutions on the subject in Europe and North America.

3.2. Broad Perspectives:

3.2.1. *Internalisation of environmental externalities*

Environmental policies, rules and standards display a wide range of variation across countries in Asia. Differences in environmental standards lead to price differences, with the result that countries in which standards are lower enjoy competitive edge in international trade. Disparity in environmental regulations pertaining to technical standards, sanitary and phytosanitary rules, and non-product related production and process methods (PPM) such as eco-labelling may exacerbate market and environmental distortions. FTAs and the process of economic integration can trigger domestic reform towards adjusting the imbalance created by variation in standards, appropriate reflection of environmental costs and enhancement of the overall level of environmental protection.

Environmental concerns arise in relation to a significant proportion of agricultural production. Agriculture both creates pressures on the environment and plays an important role in the preservation and enhancement of rural landscapes and semi-natural habitats. Domestic support measures to the agricultural sector, including production and export subsidies, result in price distortions which translate into a higher cost to the environment. At the same time, the multi-functionality of agriculture cannot be overlooked. With the understanding that both agriculture and environment policies have their own separate and legitimate objectives, integrating these policies requires an identification of ways in which they can support each other, and a careful selection of instruments that can be used for that purpose.

3.2.2. *Technological innovation and cross-border flow of environmentally-sound technologies*

The Asia-Pacific region is the leader in the environmental industry among developing countries and is expected to become a strong competitor with industrial countries. The potential growth of the environmental industry is estimated to range from 10 percent to 20 percent (US\$ 1.5 billion to US\$ 3 billion) annually. While environmental products have been the largest single market, the fastest growth is expected in environmental technology and service sectors⁴. The definition of what represents "environmental goods and services" is still a matter subject to discussion at various fora including at the WTO. Nevertheless, a number of products and services have already emerged from such discussions which would suggest the following: environmental goods may include environmentally sound technologies and products such as recycled paper, glass and metal; energy efficient products, pollution control and waste water management equipment, organic goods and agriculture based environmental goods etc. Environmental services include environmental engineering such as waste and sanitation services, sustainable tourism and transportation. It is assumed that the reduction or elimination of tariff and non-tariff barriers to environmental goods and services through regional and bilateral FTAs would enable consumers, including business and governments to acquire environmental technologies and high quality environmental goods and services at lower costs, which could lead to direct quality of life benefits for

³ World Trade Organisation (2003) *International Trade Statistics 2003*, Geneva: World Trade Organisation. Data referred to are as of 2002.

⁴ Environmental Industry Project Report (internal report), Institute for Global Environmental Strategies, February 2004.

citizens.

All this would also require an enabling policy environment for technology transfer to take place, which involves effective implementation of rules of protection for intellectual property rights as well as institutional arrangements for the purpose of financing and other needs of domestic industries with regard to technology transfer.

3.2.3. Participation of civil society and all relevant stakeholders and the strengthening of their capacities

Civil society and the general public as consumers hold a potential to influence production and consumption patterns and ultimately trade and environment policies. The involvement of civil society in policy formulation has revealed an effective way to achieving desired outcomes as a result of raising consumer awareness and support for policy implementation. The experience in North America and Europe provides some positive elements in terms of processes and mechanisms of civil society participation in the assessment of proposed trade agreements and their environmental implications. These will be considered taking into account societal values in Asia for the purpose of designing more environmentally-friendly trade policy processes and sustainable economic integration.

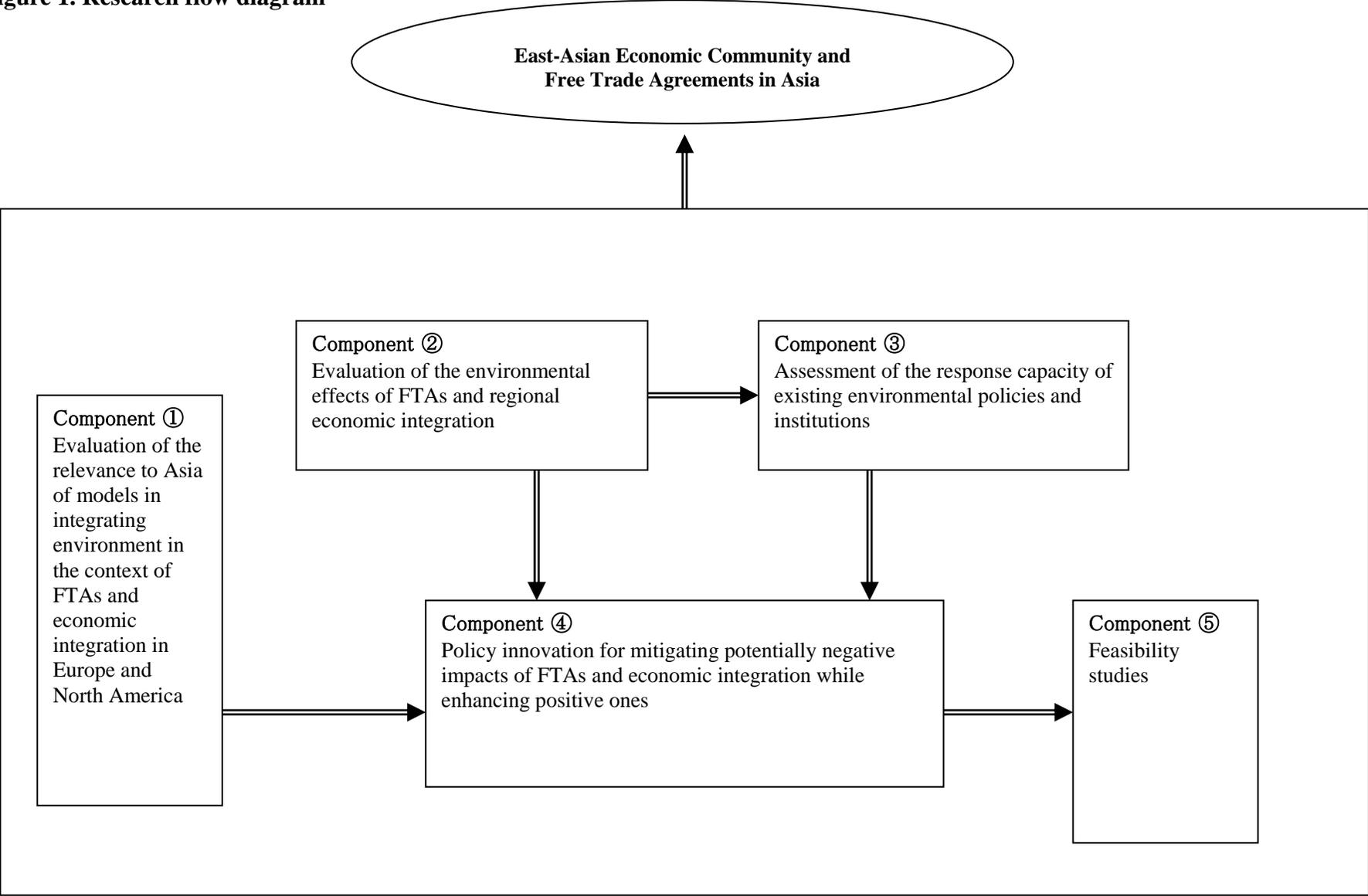
3.2.4. Formulation of environmental policies for addressing transboundary issues

A wide range of environmental problems facing countries in Asia including dust and sand storms, acid rain, forest fires and haze pollution are national in their root causes but transboundary in terms of their effects. These environmental problems are directly or indirectly related to economic activities and modes of production and will be affected by anticipated changes in the economic landscape as a result of economic integration. This requires innovative environmental policies and mechanisms at national and regional level. The process of economic integration offers a great opportunity to further regional initiatives for tackling root causes of transboundary environmental problems by means of changes in modes of production (including production and process standards), leveling-up of and regional cooperation.

3.2.5. Formulation of policies for socially and environmentally sustainable investment

The Asia-Pacific region has been a major recipient of foreign direct investment (FDI), and a long time leading investment host region among developing countries, with FDI reaching a record level of \$143 billion in the year 2000. In addition to increasing the volume of investment, one of the policy challenges is to further promote investment in environmentally and socially sustainable sectors, while preventing pollution haven phenomena, whereby polluting industries migrate from countries with high environmental standards to those countries with lower environmental standards. Provisions contained in some of the agreements already in force provide indications that FTAs have the potential of setting safeguards that prevent the weakening of environmental protection levels, and avoid pollution haven phenomenon. In addition, through a range of incentives and targeted measures (positive discrimination), FTAs can contribute to inducing investment in environmental services and technologies. Certain specific measures could be considered to foster the development of Socially Responsible Investment (SRI) funds, estimated to be at around 80 billion yen in Japan as of November 2003, and which have begun to emerge in various parts of the region.

Figure 1. Research flow diagram



Component ①: Evaluation of the relevance to Asia of models in integrating environment in the context of FTAs and economic integration in Europe and North America

(April 2005 – March 2006)

Activities under this component represent preparatory work which mainly consists in policy and literature review and consultations with experts from Europe and North America.

a. Methodologies

- Literature and policy review
Literature and policy review of regulatory approaches, institutional processes and tools and mechanisms for integrating environment in trade agreements, including integrated assessment and policy response
- Expert consultations
Expert consultations with resource persons from the International Centre for Trade and Sustainable Development (ICTSD) and International Institute for Sustainable Development (IISD).

b. Activities

- Holding of workshop on environmental policies in the European Union single market.
- Analysis of elements of relevance to Asia from European and North-American experience.
- Holding of a project panel event at MCED 2005 and 6th WTO Ministerial Conference

c. Expected outcomes

- Synthesis paper on elements of relevance to Asia in approaches to integrating environment and social safeguards in trade agreements and economic integration in Europe and North America
- Preliminary policy review paper on the state of the trade – environment interface in current FTAs in Asia
- Proceedings of project panel event at MCED 2005 and 6th WTO Ministerial Conference

Component ②: Evaluation of the environmental effects of FTAs and regional economic integration

(April 2006 – March 2007)

a. Methodologies

- Selection of baseline environmental indicators
Selection of a group of core sustainability indicators as baseline for measuring the impact that further liberalisation and changes in rule-making might have on the environment and sustainability, drawing from results of the “Needs Assessment and Performance Review in Greater Mekong Sub-Region - GEF/SEFII-ADB project”, in which IGES is a participating organisation.
- Environmental assessment framework (based on OECD methodology)

Environmental effect	Related environmental factor	Environmental Indicators				
		Air quality	Water quality	Soils/ agriculture	Biodiversity and forest cover	Waste
Scale effects						
Product effects						
Technological effects						
Regulatory effects						
Structural effects						
 Economic and social implications						

Each corresponding impacts will be filled in with signs (+++/--- for significant positive/negative impacts; ++/-- for moderate; and +/- for light; and 0 for no noticeable effects).

- Causal Chain Analysis (CCA)
Analysis of the causal chain effects of trade-induced economic, social and environmental change. This CCA will be undertaken on selected policy areas (e.g. agriculture, biodiversity). Where possible, the Causal Chain Analysis will be complemented by quantitative (modelling-based) projections.
- Quantitative assessment
A modelling exercise will be undertaken by the National Institute of Environmental Studies (NIES) which will complement other assessment tools indicated above.

b. Activities

- Identification of major domestic and external economic sectors with potential effects on the environment in selected countries
- Qualitative and quantitative assessment of potential effects of FTAs and economic integration in selected environmental sectors through National and regional policy dialogues

c. Expected outcomes

- Country-specific (selected countries) report identifying major domestic and external economic sectors with potential effects on the environment
- Sector-specific (country-relevant sectors) reports assessing the environmental effects of FTAs and economic integration
- Quantitative indicators on anticipated environmental effects (in collaboration with National Institute of Environmental Studies)

Component ③: Assessment of response capacity of existing environmental policies and institutions

(April 2006 – March 2007)

a. Methodologies

- Trade-related environment policy review
- Comparative analysis of trade-related environmental policies, laws, regulations, standards and institutions.
- Analysis of existing country studies including UNEP Country Project on Integrated Assessment of Trade and Trade-Related Policies; UNESCAP country studies; World Bank Country Strategic Environmental Assessment; WTO Trade Policy Reviews.

b. Activities

- National and regional policy dialogues
Policy dialogues will bring together partner research institutes (including Korea Environmental Institute, Chinese Academy of International Trade and Economic Cooperation, Indian Institute of Management - Ahmedabad, National Institute of Environmental Studies of Japan and Thailand Environment Institute), national agencies and regional organisations (UNESCAP, UNEP/ROAP, and ASEAN Secretariat).
- Country-specific assessment (selected countries)
- Analysis of gaps and needs for capacity building

c. Expected outcomes

- Country-specific assessment reports (selected countries)
- Reports on identified gaps and need for capacity building

Component ④: Policy innovation for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones

(April 2007 – March 2008)

a. Methodologies

- Analytical assessment of policy responses
- Identifying specific policy instruments for preventing/mitigating potential negative effects and enhancing the positive effects. Recommendations will be made regarding the viability of following policy instruments at the regional and national level: eco-labelling, extended producer responsibility, top-runner approach in the automobile industry, process and production standards, policies towards bio-trade and organic farming and socially responsible investment measures.
- Identifying workable inter-agency and civil society-open institutional processes and mechanisms for ex ante and ex post assessment

b. Activities

- Identification and analysis of cost-effective and workable (flanking and mitigatory) policies
- Formulation of institutional processes and legal settings for policy implementation
- Analysis of gaps and needs for capacity building in implementing mitigatory policies
- National and regional policy dialogues

c. Expected outcomes

- Policy proposal for cost-effective and workable environmental (flanking and mitigatory) policies
- Policy proposal for institutional processes and legal settings for policy implementation
- Proposal to address gaps and needs for capacity building in implementing mitigatory policies

Component ⑤: Feasibility studies (April 2007 – March 2008)

a. Methodologies

- Systematic comparison of local socio-economic and environmental conditions before and after particular sets of innovative policies are applied to designated pilot areas
- Evaluation criteria include, among others, sustainability, cost-effectiveness, and applicability

b. Activities

- Collection of relevant data in collaboration with local partner research institutes before and after policy application
- Preparation and coordination of activities to carry out on-the-ground feasibility studies

c. Expected outcomes

- Objective analysis of innovative policies applied to particular areas

4. Implementation arrangements

This research will be conducted through internal collaboration within IGES and the establishment of a network of strategic research institutions in the field of trade, environment and sustainable development from major trading nations of Asia. LTP will work with these research institutes on the basis of collaborative research agreements.

(1) Internal Collaboration

The research addresses cross-cutting concerns. Thus, it is closely related to all other IGES research projects. Specific collaboration with IGES projects could include: collaboration with Kansai Centre on technological innovation and technical standards; collaboration with Climate Policy Project on quantitative assessment.

(2) External Collaborators

Research institutes (alph)

- Asia-Pacific Centre for Environmental Law (Singapore)
- Chinese Academy of International Trade and Economic Cooperation (China)
- Indian Institute of Management, Ahmedabad (India)
- International Center for Trade and Sustainable Development (Geneva)
- International Institute for Sustainable Development (Canada)
- Korea Environment Institute (Korea)
- National Institute for Environmental Studies (Japan)
- Thailand Environment Institute (Thailand)

National governments and regional and international organisations (alph)

- ADB (Asian Development Bank)
- ASEAN Secretariat
- UNEP/DITE/ETB (Division of Technology, Industry and Economics/Economics & Trade Branch)
- UNEP/ROAP (United Nations Environment Programme/Regional Office for Asia and the Pacific)
- UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific)

(3) Process of policy input

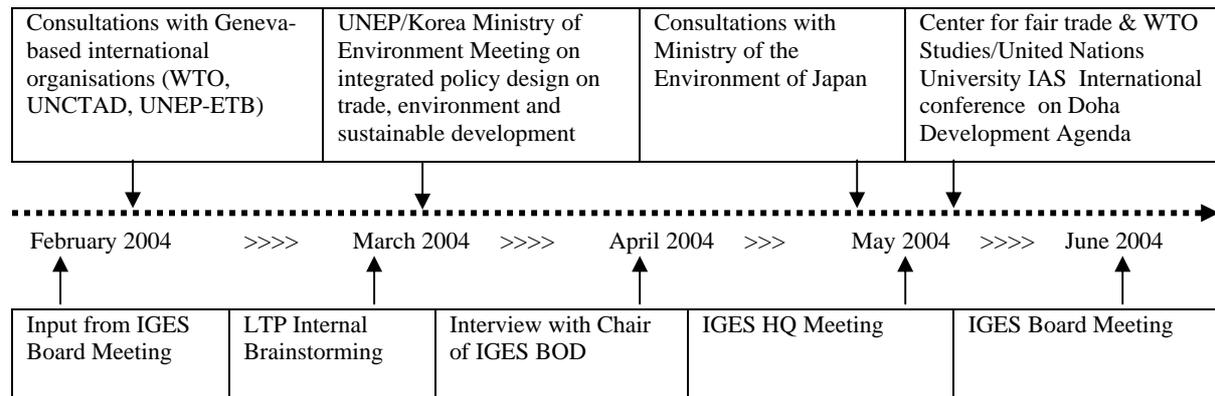
The negotiation and implementation of FTAs is a dynamic process. For policy research to be of relevance, it has to be part of the process by either responding to specific questions for which policy makers or negotiators need technical answers or by attempting to influence the agenda and substance of agreements. It is therefore important that close ties be developed with relevant agencies and actors involved in the negotiation and implementation process of FTAs at national or regional level. The usual cycle of research outcome delivered on a three years basis may not be adapted to this dynamic process. For this reason, we intend to be actively engaged in the following regional policy and political processes:

- APFED (Asia-Pacific Forum for Environment and Development)
- ECO ASIA (ECO ASIA Environmental Ministerial Conference)
- UNESCAP/MCED (UNESCAP Ministerial Conference on Environment and Development)
- 6th WTO Ministerial Conference
- Regional Policy Dialogues (to enhance sharing of experiences among countries)
- National policy Dialogues (to enhance interactions among social actors)

5. Target groups

Target groups include policy-makers and negotiators at the national and local level, decision-makers of regional and international organisations, community organisation and the public in general.

6. Process of refining the proposal



7. Roadmap of research activities and monitoring

A research advisory body consisting of IGES and NIES, among others, will be established to ensure quality of each of the individual research components.

The Research Coordination Committee of ECO ASIA, comprising representatives of all research institutes participating in the RISPO project will also serve as a monitoring mechanism through its annual meetings.

Roadmap of Research Activities

	April 2005 – March 2006	April 2006 – March 2007	April 2007 – March 2008	Related events
Component ① Evaluation of the relevance to Asia of models in integrating environment in the context of FTAs and economic integration in Europe and North America	→			- International Conference on DDA Fair Trade Center/UNU - UNCTAD 11 th
Component ② Evaluation of the environmental effects of FTAs and regional economic integration	→	→		- ESCAP/MCED 2005 - Sixth WTO Ministerial (Hong Kong) - Aichi 2005 Exposition
Component ③ Assessment of the response capacity of existing environmental policies and institutions	→	→		
Component ④ Policy innovation for mitigating potentially negative impacts of FTAs and economic integration while enhancing positive ones			→	
Component ⑤ Feasibility studies		→	→	

Sustainable Asia 2004: Synergising Stakeholder Participation

1. Theme: Synergising Stakeholder¹ Participation

- Rationale: Call for ‘Synergising Stakeholder Participation’
To create sustainable Asian societies in the long run where policy formulation, implementation, and evaluation will be carried out with synergised participation of all relevant stakeholders. Such synergized participation will require;
 - Legal and institutional schemes to secure maximum benefits from contribution of all stakeholders with a view towards more democratic and transparent policy-making processes
 - Processes to ensure collaboration of all stakeholders concerned in jointly achieving policy goals and objectives that have been determined with full participation of stakeholders.
 - Processes to ensure participatory policy evaluation for continuous mutual learning
 - Mechanisms to facilitate empowerment of ‘emerging’² stakeholders drawing upon their knowledge, resources and other capacities.
- Definition
 - ‘Synergetic’ participation: the way of participation in which the capacities of stakeholders can be developed and combined in an effective way to achieve certain goals
 - Two types of synergisation need to occur: (i) vertical synergisation between stakeholders at local, national and international levels; and (ii) horizontal synergisation between stakeholders cutting across administrative borders,

2. Scope, Approach and Target Audience :

- Geographical scope: East and South Asia
- Approach: This report is prepared drawing upon cross-cutting and integrating research activities at IGES, featuring especially effective cases of stakeholders participation in the environmental policy process (i.e. from formulation to evaluation).
- Target audiences: Policy Makers, National and Local Governments, International Organisations, Industries, Researchers, NGOs, Students and Citizens in the region.

3. Background: Challenges for Sustainable Development

- Changes in environmental problems and their underlying conditions
 - Expanded scope and increased complication
 - ✧ Environmental problems have expanded its geographical as well as contextual scope in developing countries, and have become complicated as the scope and interlinkages have expanded. (e.g. emergence of global and regional environmental problems; their influence on other sectors, such as forest and energy, and their relationship with social issues, such as poverty)
 - Environmental impacts of socio- and economic changes that have been triggered by “globalisation” and by other socio-political changes, including democratisation, decentralisation, increase of private sector participation

¹ The major stakeholders can be listed up as follows: international organisations (governmental and non-governmental), national governments; local governments; civil society groups (including NGOs, and academics); business; and the public.

² “Emerging” stakeholders include; those whose participation should be considered necessary for due process, those who became subjected to impacts by expanded social and economic activities, and those who have become capable of meaningful participation.

- ✧ Structural changes in domestic economy due to the expansion of trade and investment, or due to the opening of markets.
- ✧ Changes in the role of national governments vis-à-vis “globalised” economy and participatory policy formulation systems.
- ✧ “Globalisation” without regard to local environmental, social and cultural values.
- ✧ Consequent intensification of environmental and socio-cultural issues to the extent that (i) they become trans-boundary in causes and impacts, and (ii) environmental problems of different natures are taking place concurrently (i.e. Environmental problems do not necessarily occur consecutively – such as; poverty-caused, pollution and quality-related problems.)
- Increased opportunities for interaction among stakeholders which contributes to meaningful participation.
 - ✧ Easier movement of essential flows such as information, funds, experts and technologies.
 - ✧ Particularly exchange of information on successes and failures of policy practices, as well as innovative technologies and indigenous knowledge, and.
 - ✧ Enhanced awareness over environment and sustainable development issues among the general public.

4. Structure :

This report explores avenues for synergising stakeholder participation to enhance environmental management and sustainable development in Asia. Its structure is as below.

- Part 1 (Overall Analysis)
 - Chapter 1: Challenges - the recent institutional and environmental changes in Asia
(The overall framework of this report, including scope, theme, etc)
 - Chapter 2: Sectoral Overview
(The trend of stakeholder participation in sectors, drawing upon from Part 2)
 - Chapter 3: Synergetic Stakeholder Participation
(Policy-level recommendations on synergising participation by stakeholders in Asia)
- Part 2 (Sectoral Analysis)
 - Chapter 4: Forestry
 - Chapter 5: Water Resources Management
 - Chapter 6: Climate Change
 - Chapter 7: Urban Environmental Management
 - Chapter 8: Environmental Education.
 - Chapter 9: Business and the Environment

5. Schedule : FY2004

Phase 1 (Making Outline)

- ~End of Apr. 2004 Make the outline of the publication (including editorial policy such as theme and scope)
- ~13th May Make the outline for the first three chapters on the overarching theme
- ~14th May Notify IGES in-house staff of the outline and schedule of this project, in addition to their roles in it.

Phase 2 (Completing the First Round Revision)

- 25~ 26th Jun. Report the outline of the publication to the Board Meeting
- ~Late Jun. Deadline of the revision based on the comments from the reviewers as well as the outline above.
- July. Share the draft with all the IGES staff. Hold all-IGES meeting to have comments on it.
- ~Late Aug. Revise the draft based on the comments from the board members and in-house staff. Complete the first round revision.

Phase 3 (Completing the Second Round Revision)

- ~Late Sept. Review and revise the draft under the guidance of the President and Prof. Bezanson.
- ~Late Nov. Review by external experts
- ~Mid Dec. Revise the draft based on the comments from the reviewers. Complete the second round revision.

Phase 4 (Editing / Publishing)

- ~Late Jan. 2005 Edit the draft including figures/graphs and index. Proof read the draft in parallel.
- ~ Mid Feb. Prepare the Camera Ready Copy. Report to the Board Meeting.
- ~Late Mar. Print/Publish

APFED Action Platform

I. Introduction

Most of the recommendations proposed in the main report are those to be realized over the medium to long term at the regional, sub-regional, national and local levels, taking into account predominant future political, economic, social and environmental conditions. In this sense, the recommendations above suggest broad directions in which this region as a whole should move to attain sustainable societies. Now the key question is what needs to be done as a first step to turn these recommendations into reality. The APFED Action Platform serves that purpose. It proposes immediate actions APFED could take as follow-up to the APFED Final Report over the coming five years to facilitate and nurture sustainability initiatives in the region. Indeed, there is the proposal to initiate APFED II to mobilize this region from within for sustainable development, acting on recommendations contained in the APFED Final Report.

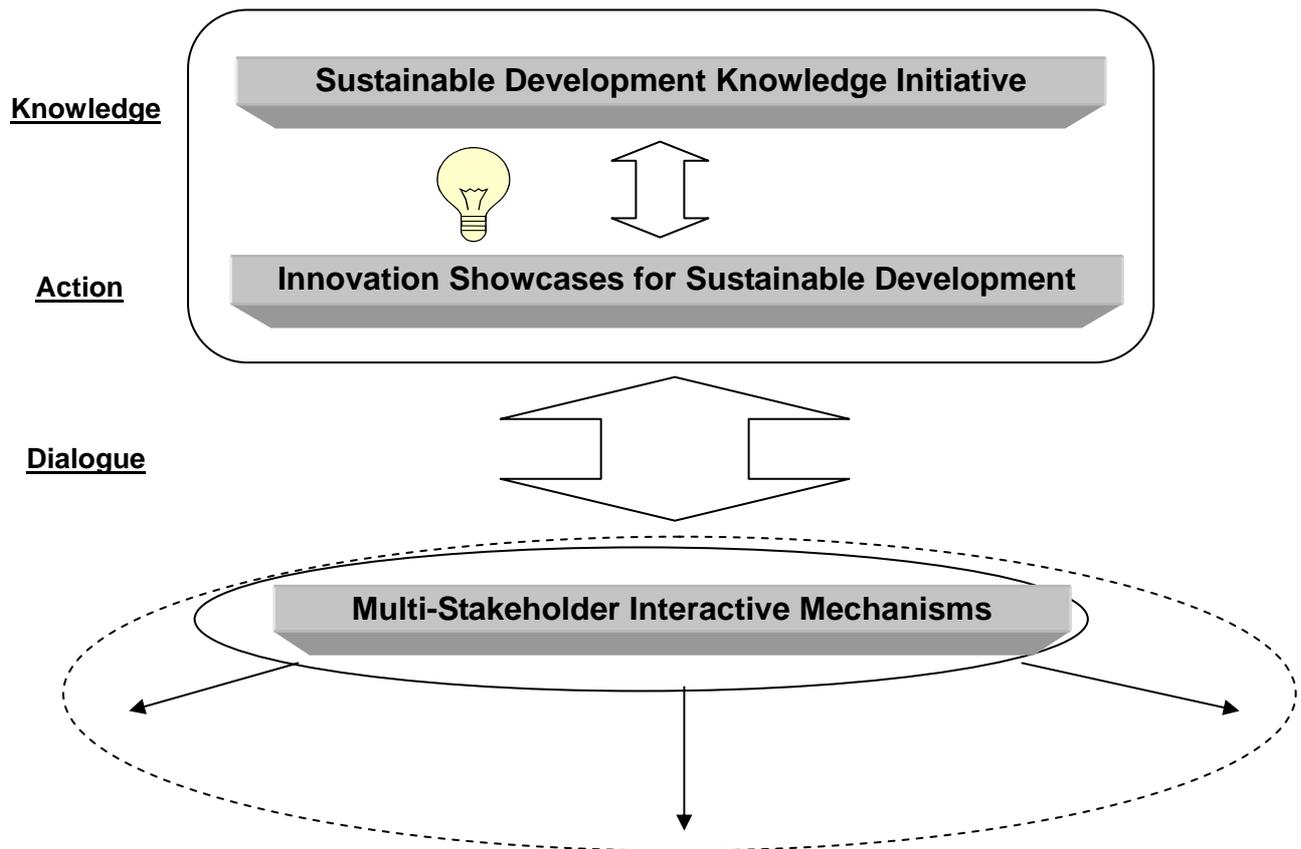
To put the region on a truly sustainable path takes a long time. The sustainable societies APFED envisages for the region in the future will be diverse, not uniform, and will take various forms, reflecting the socio-cultural and natural differences found in this region. Sustainable societies will be economically dynamic yet modest in their use of natural resources. They will be democratic, equitable, and sustainable. To realize diversified futures of this kind, the Action Platform should be truly participative, encouraging mutual learning, and promoting innovation, while ensuring diversity for the future of this region.

The APFED Action Platform consists of the following three broad components:

- (i) Multi-Stakeholder Interactive Mechanisms,
- (ii) Sustainable Development Knowledge Initiative, and
- (iii) Innovation Showcases for Sustainable Development.

These three components are designed as intercomplementary. The Knowledge Initiative will be responsible for knowledge management. Innovation Showcases will serve as a source of innovative ideas, with various innovations tried out in the field and the lessons learned through demonstration projects fed back to the Knowledge Initiative. These innovative ideas will be discussed and shared through the Multi-Stakeholder Interactive Mechanisms with all concerned stakeholders in the region. (See Figure 1)

Figure 1: Components of APFED Action Platform



The Multi-Stakeholder Interactive Mechanisms, the interactive window of APFED, are designed as an informal network of experts from different countries and of all backgrounds. They could be developed, in the future, into an Asia-Pacific Multi-stakeholder Dialogue for Sustainable Development, a body setting a sustainability agenda for the region by formally networking National Sustainable Development Councils (NSDCs) of countries in the region, as proposed in the APFED main report. The Multi-Stakeholder Mechanisms are to be comprised of a variety of consultation processes involving relevant stakeholders in the region to discuss and, whenever possible, to work out concrete ways and means of addressing priority issues for the realization of a sustainable future for the region.

The Sustainable Development Knowledge Initiative is intended as the brain-house for APFED II. The Initiative will collect lessons and experiences obtained from innovative actions implemented to promote sustainable societies in the region, extract wisdom from lessons and experiences to distill underlying principles for a sustainable Asia-Pacific, and share wisdom with all stakeholders concerned. It will be an engine to generate capacity in the region for sustainable futures. The APFED Sustainable Development Knowledge Initiative will be composed of (i) a network of databases containing extensive examples of good practices for sustainable development, (ii) lesson-learning mechanisms from past and on-going actions, and (iii) workshops

and other knowledge-sharing activities.

The Innovation Showcases for Sustainable Development will be the implementation arm of APFED II. The Innovation Showcases will provide opportunities for various actors in the region to try out innovative policies, technologies and practices. Innovative ideas will be put into practice on an experimental basis to verify if proposed ideas do in fact fit into different political, economic, social and natural conditions of a country or area to which they are applied. The Innovation Showcases are proposed to try and incubate various innovations considered appropriate for the region and facilitate their application in different parts of the region.

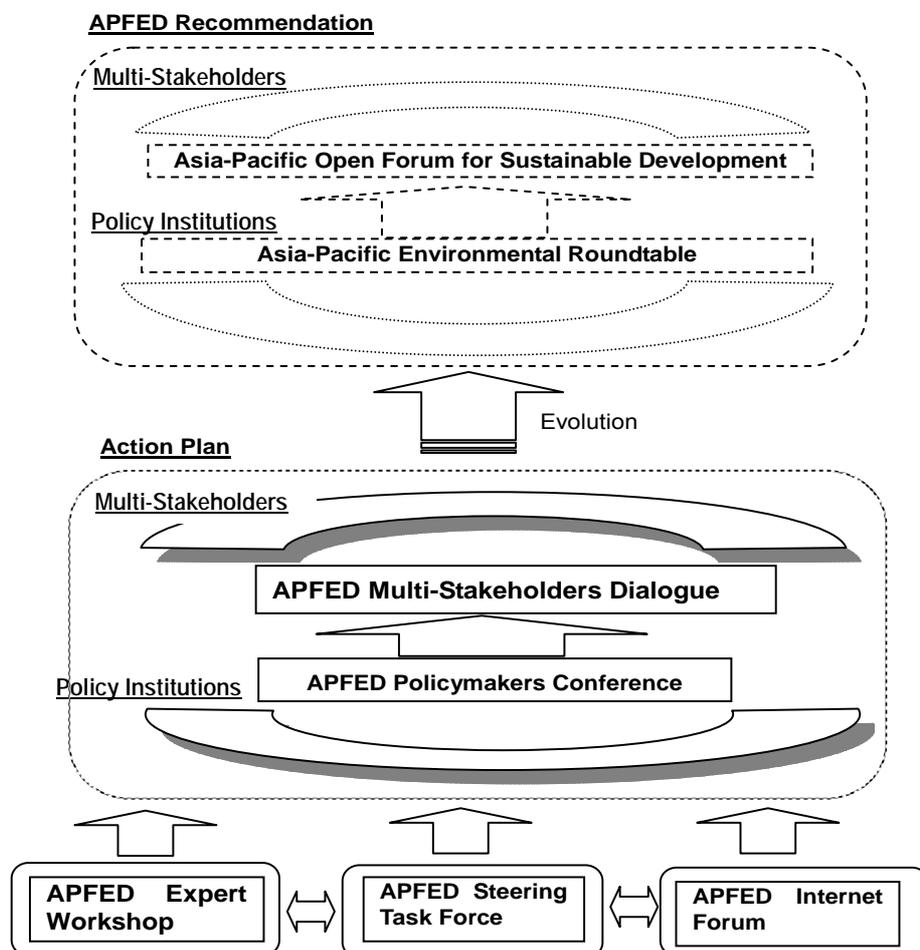
APFED is only a small initiative in the region. But it is a participatory and open regional forum. Its messages are not intended to be imposed upon governments, international organizations, or any other stakeholders in the region. The value of APFED's recommendations lies in its stance that continuing dialogues with key stakeholders, sharing experiences and wisdom with others, and proposing challenging new ideas will make this region more sustainable in the long run. In this respect, APFED will continue to be an advocate of a sustainable Asia-Pacific, seeking the thorough implementation its Action Platform in collaboration with like-minded stakeholders in the region.

II. Multi-Stakeholder Interactive Mechanisms

APFED is not a decision-making body. It is only an informal catalyst promoting sustainable future societies in the region. APFED is therefore aware of the fact that further and more detailed consultations are necessary to make the APFED recommendations a reality. Indeed, the Multi-Stakeholder Forum is proposed for continued policy discussions in the region.

The Multi-Stakeholder Mechanisms will consist of two consultative bodies, paralleling the main report's suggestions with regard to institutional strengthening in the region. The two consultative bodies will be: (i) the APFED Multi-stakeholder Dialogue and (ii) the APFED Policymakers Conference. These two bodies will function in tandem to address key sustainability issues in a time bound manner. In addition, there will be three subsidiary bodies to support the two consultative bodies. They are (i) APFED Expert Workshops, (ii) the APFED Internet Forum, and (iii) the APFED Steering Task Force. Expert workshops will be held as necessary to conduct detailed analysis on subjects raised at the two consultative bodies. The APFED Internet Forum will be utilized as necessary to solicit views and opinions from the public on important subjects selected by the two consultative bodies. A Secretariat will be established to anchor all the interrelated activities of APFED. (See Figure 2)

Figure 2: Multi-stakeholder Interactive mechanisms



1. APFED Multi-Stakeholder Dialogue

The APFED Multi-Stakeholder Dialogue will be composed of representatives from civil society groups, the private sector, and the public sector (specifically central governments, international organizations, and local governments). Representatives will be selected taking into account the nature of the issues to be discussed and geographical balance. Each year, a multi-stakeholder dialogue will be organized to set priority issues to be addressed and to identify areas of agreement and disagreement among participating stakeholders. These areas of concern identified will form the framework within which the APFED Policymakers Conference and the APFED Expert Workshops will conduct more detailed examination. A multi-stakeholder dialogue will be called upon to discuss findings and recommendations of detailed analyses conducted by the APFED Policymakers Conference and/or the APFED Expert Workshops.

2. APFED Policymakers Conference

The APFED Policymakers Conference will be composed of selected executive officials from governments in the region and international organizations working for the region. Participants could change according to the agenda selected each year. It will take up the priority issues set forth by the APFED Multi-stakeholder Dialogue every year, examining relevant policy issues in an unofficial and non-committal basis to ensure constructive discussions. The Conference would be intended to identify areas of agreement and disagreement and discuss possible ways on how points of disagreement could be narrowed down or resolved. Sustainable finance mechanisms for the region could be one of the early agenda items for the Conference, as indicated in the box below.

Box 1: Asia-Pacific Environmental Finance Roundtable

This recommendation involves both developed and developing nations in the region as well as relevant financial institutions gathering together to discuss innovative financial mechanisms to promote environmental conservation and sustainable development in the region. Various financial mechanisms suggested in the main report may have the potential to be applied to various parts of the region.

One focus would be regional or sub-regional level mechanisms to address cross-boundary environmental issues. The need, scale, and nature of possible regional/sub-regional funds would be scrutinized. Trans-boundary environmental issues to be covered by such funds could be clearly defined and operational principles, such as co-financing and the incremental costs approach, could be agreed upon, taking into account experiences with the GEF (Global Environment Facility) and other international finance mechanisms. Also important could be examination of the possibility of introducing innovative mechanisms similar to those included in the Kyoto Protocol into regional/sub-regional environmental issues.

Another focus would be how endogenous financial mechanisms suggested in the main report could be created in various parts of the region. Good practices for financing local environmental projects within the region would be collected and analyzed to draw experiences and lessons out of past and on-going attempts. It is

imperative to involve actual practitioners of innovative environmental financing in this dialogue.

Alternately, the initial concern of the sustainable finance could be in relation to renewable energy, because there is an urgent need to:

- examine innovative combinations of financial instruments, including governmental subsidies with local development funds and end-user fees, or a combination of subsidies with loan ownership models,
- introduce policies enabling emissions trading and the CDM when the Kyoto protocol is put into effect, and
- create specific funding or market mechanisms which would bring renewable energy technologies onto fair competitive footing.

3. Subsidiary Bodies

3.1 APFED Expert Workshop

A series of expert meetings will be held as necessary to conduct detailed analyses of issues identified either through the Multi-stakeholder Dialogue or by the APFED Policymakers Conference. Expert workshops will bring together scientists, policy analysts, economists, or any other experts concerned, depending on the issues in question.

A quick survey or study will be conducted, if necessary, to collect additional information. The Good Practice Databases and other knowledge-based mechanisms developed under APFED (see the next section below) will be fully utilized. Papers summarizing experts' views will be prepared and submitted for further deliberation at the APFED Multi-stakeholder Dialogue or the APFED Policymakers Conference

3.2 APFED Internet Forum

An APFED Internet Forum will be set up, whenever appropriate, to solicit views and comments from other stakeholders and the general public inside and outside of the region on key issues identified by the APFED Multi-stakeholder Dialogue and/or the APFED Policymakers Conference. Draft final reports of the APFED Multi-stakeholder Dialogue or other APFED consultative bodies will be, in principle, put on the Internet for public comments. Views received through the Internet Forum will be taken into account during the finalization of APFED reports, among other times.

3.3 APFED Steering Task Force

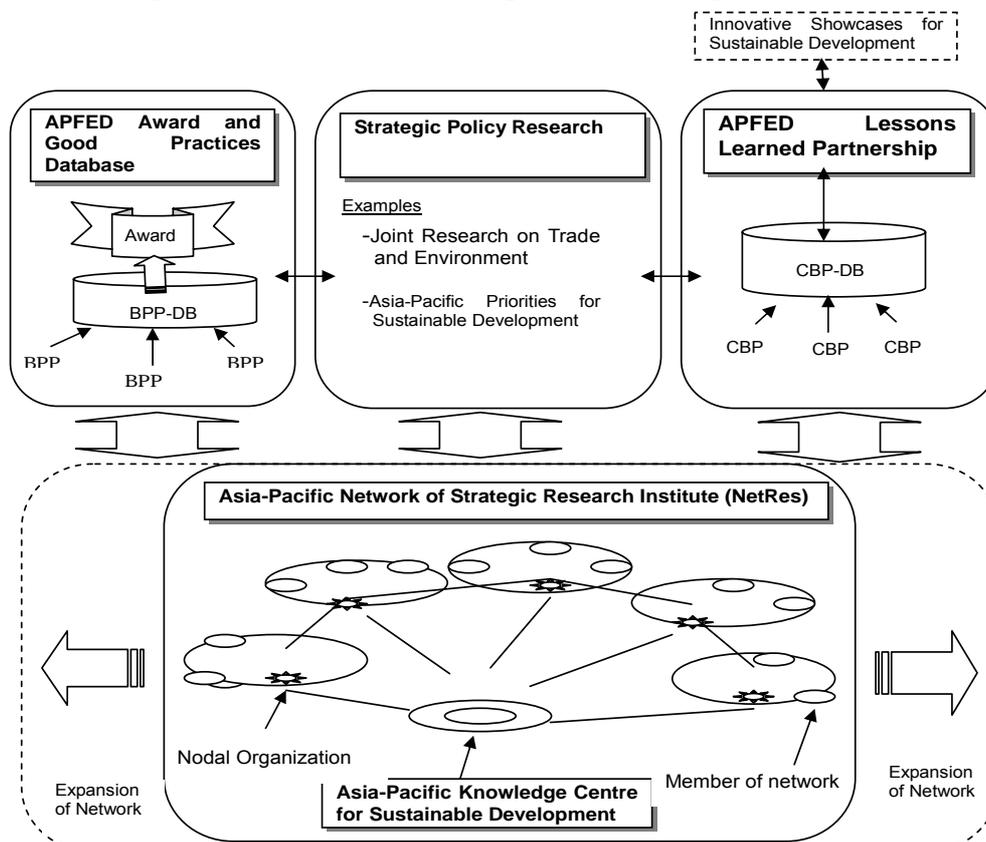
The APFED Steering Task Force will be set up to coordinate and manage all the interactive activities mentioned above, as well as activities planned under the Sustainable Development Knowledge initiative and the Innovation Showcase for Sustainable Development elaborated below. The Task Force will consist of (i) the Steering Committee, and (ii) the Secretariat. The Steering Committee will be composed of eminent persons from selected countries of the Asia-Pacific. The Steering Committee will be responsible for providing overall guidance regarding APFED activities. It will set APFED milestones and monitor progress. The Secretariat will be composed of a modest number of international staff, responsible for day-to-day management of various APFED activities.

III. Sustainable Development Knowledge Initiative

The Asia Pacific region is characterised by natural and socio-cultural diversity as well as by a huge population. In order to turn these features into strengths of the region, a strong knowledge management system needs to be in place in the region. Systematic knowledge management is the only way to translate the rich and diversified lessons learned through various initiatives in the region into endogenous capacity in the continuing quest for sustainable development. Indeed, the sustainable future of the region depends on how successful this region will be in building internal capacity in terms of institutions, system and human resources for the effective handling of the sustainable agenda of the region.

The proposed Sustainable Development Knowledge Initiative will contribute to building endogenous capacity in the region for promoting sustainable development by establishing an effective knowledge management system. It will consist of (i) Strategic Policy Research, (ii) the Asia-Pacific Network of Strategic Research Institutes (NetRes), (iii) the APFED Award and Good Practices Database, and (iv) the APFED Lessons learned Partnership. It is important to note that the three APFED Commitments to the WSSD underlie these four proposed activities. The second activity, namely the establishment and operationalisation of NetRes itself, is closely linked to the first activity. Strategic Policy Research will be developed drawing upon the strength of NetRes. The third activity is the expansion of the BPP already developed by APFED. The core element of the fourth activity is CBP, the information base of training institutes in the region (see Figure 3).

Figure 3: Sustainable Development Knowledge Initiative



1. Strategic Policy Research

Strategic policy research will be conducted on a regional or sub-regional basis on key topics for sustainable development in the region. Research subjects will be decided through sessions of the coordinating bodies of the APFED Interactive Mechanisms. A possible topic for the immediate future could be trade and environment, given rapidly developing economic integration in Asia through the conclusion of Free Trade Agreements (see Box 2 below). Research will be conducted in partnership among policy research institutes, international bodies and other competent organizations in the region. Participation in strategic research will be open to any competent institute in the region, to be decided based upon the strengths and effectiveness of application submitted by each institute concerned.

Box 2: Joint Research on Trade and Environment

The last few years have seen an unprecedented surge in bilateral and regional trade arrangements seeking further liberalisation and expansion of economic activities in the Asia-Pacific region. Extensive discussions are being made among countries in the region to develop bilateral and multilateral free trade agreements (FTAs), and new economic groupings such as the East-Asia Economic Community are in the making, all of which will fundamentally alter the dynamics of opportunities and constraints for sustainable development.

Since issues relating to the environment are less likely to be treated as priorities under trade negotiations, including negotiations on FTAs, a joint regional study by the institutes concerned is considered imperative in helping those directly involved in negotiations become more aware of the environmental consequences of FTAs and other trade agreements. Joint research could provide a foundation upon which environmental concerns are more appropriately taken into account during FTA negotiations as well as during their follow up processes. Focal points of the joint research could be:

1. Analysis of environmental policy harmonization in Europe and North America,
2. Identification of possible environmental implications of FTAs,
3. Review of environmental policies that need to be harmonized, and
4. Elaboration of environmental policies compatible with economic integration (e.g. region-wide recycling and promotion of fair trade)

Also important is the translation of research findings into actionable policy agenda. In this respect, integrated assessment of key sustainability issues is considered essential. Now that the WSSD process has set forth rotating sectoral focuses, it is important for this region to prepare relevant synthetic papers in conjunction with global deliberations. One such example is the development of an Asia-Pacific Water Development Report, as elaborated in the box below.

Box 3: Asia-Pacific Water Development Report (APWDP)

APWDP is intended to enhance understanding of current water-related problems and challenges in the Asia-Pacific region. APWDP will be produced in collaboration with the organizations and networks concerned in the region.

The report will compile existing information on the state of water resources, identify regional priority issues, and ways and means of addressing these issues as joint efforts among key stakeholders, keeping in mind historical, social and economic constraints surrounding water resources management of the region.

APWDP will serve as the basic document upon which stakeholders in the region will reinforce integrated water management of the freshwater resources of the region.

2. Asia-Pacific Network of Strategic Research Institutes (NetRes)

The need for strategic research of the region to produce innovative policies for sustainable development is so enormous that no one institute can address the situation single-handedly. Only extensive networking of institutes concerned could enable dealing with them appropriately.

In recognition of this, in March 2004, UNEP, in collaboration with the Korean Environment Institute, organized a first-ever meeting of research institutes on trade and environment prior to its Third Global Environment Ministers Conference in Jeju, Korea. Exploring possible collaboration among the various research institutes active in trade- and environment-related research was timely, particularly for Asia.

APFED is already committed to establishing a network of research institutes of the region (NetRes; see the Box below). However, it is important to note that such networking will be maintained only as long as good reasons exist. The rationale for the proposed research network (i.e., the Asia-Pacific Network of Strategic Research Institutes [NetRes]) will be joint activities with respect to strategic research, synthesis, or fundraising. Only through joint research and other activities catalyzed by APFED will NetRes be established, expanded, and consolidated.

Also important is collaboration with other research networks such as APN, the network of research institutes on trade and environment mentioned above, and other relevant international or regional networks.

Box 4: Asia-Pacific Network of Strategic Research Institutes (NetRes)

The Asia-Pacific Network of Strategic Research Institutes could be established on the basis of NetRes, which will be set up under the APFED process. In so doing, the following steps are suggested, which would be taken by the APFED secretariat under the guidance of APFED members:

- Identification of all strategic research institutes involved to date in the APFED process, complemented by other relevant institutes;
- Planning for and holding a first meeting of research institutes in the Asia-Pacific region. The logistical arrangements and financial requirements for such a meeting could be jointly supported by governments through voluntary contributions made via the APFED Secretariat;
- Once the network has been established, one of the participating institutes could be designated as the host of the NetRes and serve as the liaison office; and
- A website would be developed linking all members so as to enable electronic communications and an exchange of information. This website would also be managed by the designated host institute.

3. APFED Award and Good Practices Database

APFED has already started setting up a BPP (Best Policy Practice) Database. Efforts will continue to further strengthen the BPP database. Much broader sets of policies and practices will be collected through various channels. Areas covered by the strengthened database will be expanded to include all important issues regarding sustainable development for the region.

An APFED Award is proposed to provide incentives for civil society groups and other stakeholders in the region to come to APFED with their initiatives for inclusion in the BPP database. Formal recognition will be given to all good practices selected for inclusion in the database. In addition, award-winning practices will be recorded in video format so that useful lessons gained through such practices can be shared with all interested organizations and individuals by means of the mass media and other communication channels.

Furthermore, the networking of civil society organizations (CSOs) in the region could be promoted through the collection of good practices and the APFED Award. This is considered quite important, given the relatively weak current capacities of CSOs in the region.

4. APFED Lessons Learned Partnership

No project is useful unless the intended results are delivered. This orientation towards results has become a world norm. This requires a new mechanism which would enable continuous learning from successes and failures of projects practiced in the field. Lessons learned would be utilized in designing and implementing future projects. This circle of doing and learning will lead to an upward spiral to continually enhance the quality of future projects. In this respect, APFED has suggested the promotion of “Participatory Monitoring and Evaluation” as one of its recommendations in the section on “Systems Development for Partnership.”

What is proposed here is a partnership among different stakeholders to learn jointly lessons from the past and on-going projects. APFED workshops and Internet forums on selected topics will be held to share lessons among participants and all others concerned. This will be connected to the lessons learned practice to be introduced in connection with the evaluation of innovative initiatives supported by the “Innovation Showcases for Sustainable Development” elaborated below.

In addition, APFED will try to expand such opportunities in collaboration with other training institutes operating in the region. In this connection, APFED has also started preparing a database on capacity building programs (CBP) for the region. Already quite a number of institutes and their training programs have been identified. Efforts will continue with regard to the regular updating of CBP so that potential users can get comprehensive and updated information regarding capacity building opportunities available in the region. Furthermore, it may be a good idea for all the training institutes to get together to exchange views and opinions on how this lessons learned exercise could be promoted further for the region.

IV. Innovation Showcases for Sustainable Development

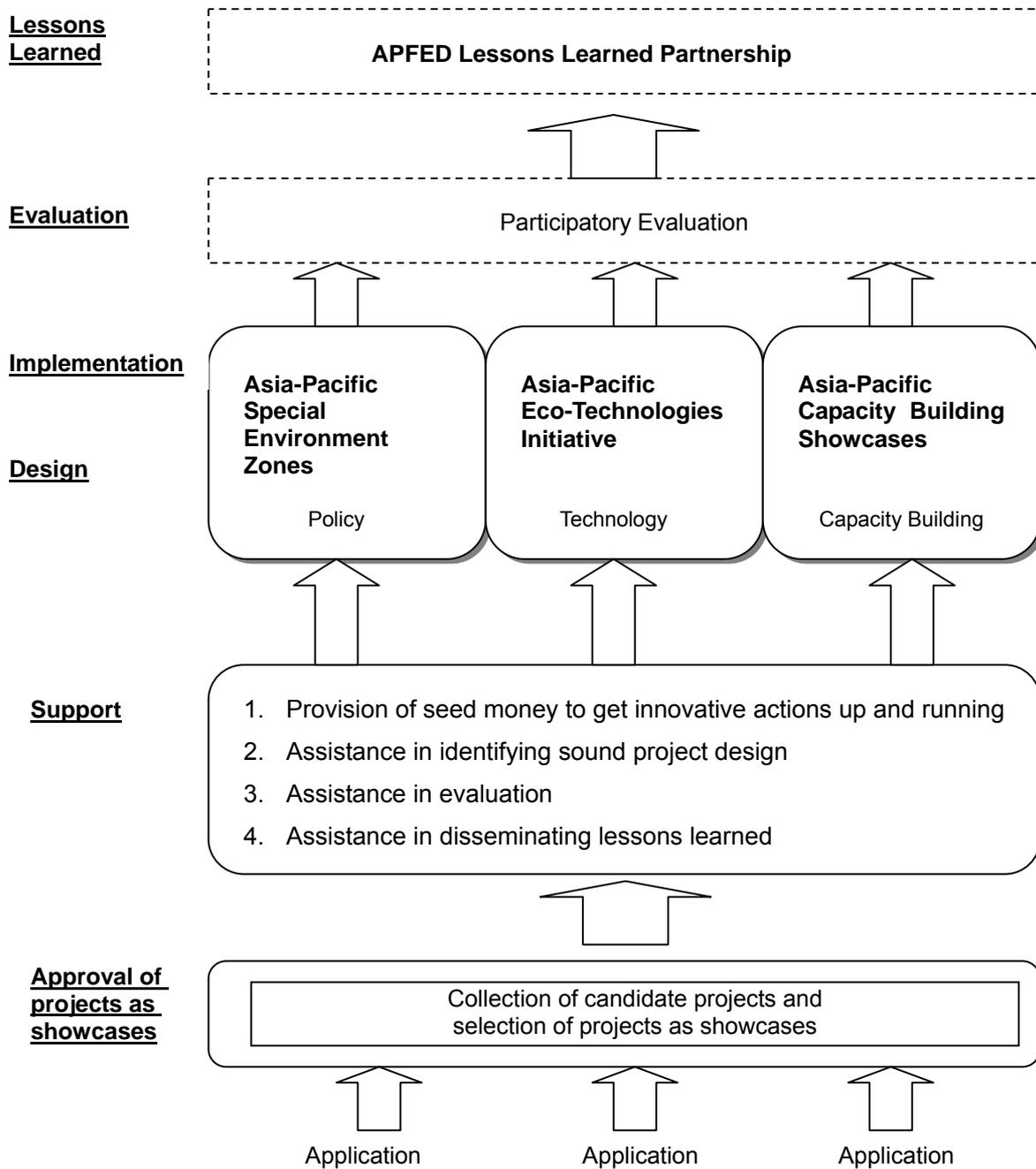
Innovation Showcases will provide opportunities for various actors in the region to try out innovative policies, technologies and practices. In many countries of the region, new policies are introduced throughout the entire country once approval of the national legislative body is obtained. The same is true with technologies and capacity building activities. Once some kind of nation-wide guidance is established, standardized technologies and uniform capacity building practices are put into practice. However, this kind of approach runs the risk of creating nation-wide problems if these new policies/technologies/practices are inappropriate in light of local situations. It is important to understand that a policy/technology/practice which has been successful in country A does not necessarily work in country B, because of underlying differences in political, social, economic and other conditions. Hence, it is worthwhile to create opportunities in which innovative policies, technologies and practices would be introduced on an experimental basis to determine if such innovations actually deliver the intended objectives and if they generate any unintended negative effects.

Innovation Showcases for Sustainable Development are composed of three initiatives:

- i) Asia-Pacific Special Environment Zones,
- ii) Asia-Pacific Eco-Technologies Initiative, and
- iii) Asia-Pacific Capacity Building Showcases.

The Asia-Pacific Special Environment Zones initiative aims at promoting innovative policies mainly in designated areas of a country. The Asia-Pacific Eco-Technologies Initiative is intended to provide opportunities for assessing the feasibility of two types of innovative technologies, mitigation technologies and adaptation technologies. The Asia-Pacific Capacity Building Showcases are a mechanism to try out innovative capacity building practices (see Figure 4 below).

Figure 4: Innovative Showcases for Sustainable Development



Policies are formulated with the intention of changing people's behavior one way or another. Thus, nation-wide legislation tends to receive resistance from people and interest groups who fear changes to accompany the policies to be introduced. As a result, politically speaking, only gradual change (incrementalism) is possible in some countries of the region, hampering the introduction of innovative policies even if they are clearly necessary. Thus, experimentation with various innovations in limited geographical areas of a country could ultimately expedite adoption of such innovations in the region.

In addition to innovative policies, demonstration of new technologies for both mitigation and adaptation will be equally important. Technological leap-frogging is clearly necessary for this region to promote the sustainability agenda. Since the Asia-Pacific region is diverse in natural and socio-cultural settings, it is imperative to verify feasibilities of new technologies vis-à-vis local conditions.

Furthermore, new approaches to capacity building should be promoted in the region. Given the huge population of the region, capacity building needs are enormous. New tools such as ICTs should be fully utilized and new teaching methodologies and learning practices should be further developed for effective capacity building of the region for sustainable development.

Given the nature of showcase projects, a sound evaluation process has to be introduced. Evaluation findings reveal strengths and weaknesses of the measures being implemented and indicate how they should be modified for future application. Participatory evaluation is essential to get diverse views and opinions as to how proposed measures could be extended to further applications.

The way APFED will be associated with these demonstration projects merits careful discussion. APFED itself is neither an implementing body nor a funding body. It is a forum to catalyze innovative initiatives to promote sustainable societies in the region. In this regard, possibilities APFED could consider include (i) provision of seed money to get innovative actions up and running, (ii) assistance in coming up with sound project design, (iii) assistance in evaluating successes and failures of projects and (iv) assistance in disseminating lessons learned. It is proposed to set up a small grant facility within APFED to support innovative initiatives of the region in a small way, addressing all of or some of the four possibilities in which APFED makes itself associated with innovations.

1. Asia-Pacific Special Environment Zones

Asia-Pacific special environment zones are showcases of innovative policies and practices for conservation and sustainable development in a county. Certain areas of a country (e.g., cities, islands, basins) could be designated as special environment zones (SEZs) for which unproven yet proactive environmental policies/practices would be designed, experimented with, and monitored for effectiveness. SEZs are expected to be a powerful conduit to put innovative environment policies into practice in the region.

Measures potentially applied to SEZs could include public policies, such as various fiscal measures including environment taxes and burden sharing schemes including a river basin tax, as well as more private-oriented practices, such as market-driven approaches including emissions trading, community-based approaches including local eco-currencies, and trans-boundary mechanisms including trade in recyclables. Indeed, SEZs could go beyond national borders if they are considered complementary to each other. Zero emissions by means of trade in recyclable materials among cities in different countries could be a possibility. The SEZ scheme could be introduced at the sub-regional or regional level, involving countries with similar socio-economic conditions, resulting in mutual learning and potentially stimulating constructive and positive political discussions.

National legislation could be necessary in many countries in order to introduce SEZs. Such legislation would allow local cities and governments to set up SEZs according to guidelines set out by the national government, possibly in return for subsidies and tax exemptions. Alternatively, the central government could devolve a portion of national responsibility to local governments to enable them to adopt innovative policies and practices on their own initiative.

2. Asia-Pacific Eco-Technologies Initiative

The Asia-Pacific Eco-Technologies Initiative covers both mitigation technologies and adaptation technologies. Mitigation technologies will be demonstrated in the Eco-Industrial Parks whereas adaptation technologies will be demonstrated through the Eco-Restoration Technologies Initiative.

2.1 Eco-Industrial Parks

Eco-Industrial Parks (EIPs) would be showcases of innovative technologies for conservation and sustainable development in a country. New technologies or new technological systems developed for conservation and sustainable development would be introduced in the context of actual local conditions to determine their social, economic and other kinds of feasibility.

Technologies and systems to be tested could include those related to, for example, renewable energy such as wind, solar, and biogas, zero-emission factory complexes, and participatory composting and recycling as waste management. One example regarding renewable energy is presented in the Box below. The use of indigenous knowledge and technologies should be promoted to the extent possible.

International cooperation could be a key factor for the success of EIPs, because in many cases EIPs inherently assume technological transfer from developed countries to developing ones. Also important could be involvement of the private sector, as the majority of technologies are retained by private companies.

Key factors to successful technology transfer could be an enabling environment which provides at least equal footing to new technologies, legislation that respects intellectual property rights, and environmental standards and regulations which are properly implemented. These policy aspects should also be examined in the execution of EIPs.

Box 5: Clean Energy Islands

There are many islands in the region. At present, diesel is the main energy resource for these islands. In the year 2000, the Ministerial Conference on Environment and Development in Asia and the Pacific, held in the city of Kita-Kyushu, Japan, adopted a Regional Action Programme for Environmentally Sound and Sustainable Development, 2001-2005, which *inter alia* called for a dedicated global project to create 100% renewable energy, hydrogen-based economies in the small island developing states of the Asia-Pacific region. It is possible to provide a stable energy supply on many of these islands through a combination of wind, wave, solar, and small-scale hydroelectric power. Such combined renewable energy systems could be established on selected islands as “showcases,” which could lead to replication by similar projects on other islands of the region.

2.2 Eco-Restoration Initiative

Eco-restoration projects represent a new type of public works for the rehabilitation of environmentally-degraded areas of the region. Use of indigenous knowledge and technologies should be promoted whenever possible. The region’s degraded areas are constantly increasing due to desertification, salinization, water logging, deforestation, and contamination. The need to rehabilitate such degraded areas will substantially increase in the future as the population and economy expand. This would be a modest pilot initiative to address the massive challenges this region faces in rehabilitating degraded lands.

Pilot areas would be selected from among degraded lands of a nation according to their priority. Causes of degradation would be identified, rehabilitation plans prepared, rehabilitation technologies determined, necessary financing, including government subsidies, arranged, and actual rehabilitation conducted. However, the most important component of eco-restoration projects is stakeholder participation. Otherwise, the very same mistakes which have caused degradation in the past could be repeated.

Eco-restoration requires strong government support in terms of finance and technology. With initial demonstration projects, it is hoped that governments in the region would shift their public works priorities to eco-restoration projects. At the same time, public works which tend to create significant negative environmental impacts should be curtailed to the extent possible by means of proper implementation of environmental impact assessment. Otherwise, the positive environmental services generated by eco-restoration projects will easily be nullified.

3. Asia-Pacific Capacity Building Showcases

There is widespread consensus that capacity building is one of the most important elements for achieving sustainable development in the region. However, conventional capacity building practices conducted in countries of the region, and those provided by bilateral and multilateral organizations, have been far from sufficient in matching the ever-increasing needs of the region. Apparently, it is important to improve and reinforce the current capacity building activities both in terms of quantity and quality. The Asia-Pacific Capacity Building Showcases aim at developing innovative capacity building practices by identifying and supporting good practices conducted in countries in the region.

What constitutes good practices for capacity building is a difficult question to answer, but the following approaches may provide a useful starting point: (i) the integrated approach (i.e., a holistic approach to combine capacity development with environment monitoring and other local environmental initiatives), (ii) use of information and communications technologies (e.g., e-learning), (iii) the participatory approach (e.g., the involvement of NGOs, scientific organizations, and other local CSOs), and (iv) the international/regional approach (e.g., an inter-university credit system). The APFED main report includes many actual recommendations along these lines.