Inclusion of services in the framework of General Agreement on Tariffs and Trade (GATT) was one of the most controversial issues during the Uruguay Round (UR) negotiations. However, finally the same was agreed upon under pressure and on the assurance that the agreement on services would allow enough flexibility to liberalize at their own pace. Four modes of supply, including movement of capital and labour, were developed as part of the General Agreement on Trade in Services (GATS) framework agreement so that the member countries could organize and schedule their commitments and obligations. Thus, in the context of GATS/World Trade Organization (WTO), the concept of international services ‘trade’ encompasses, in addition to traditional cross-border transactions (Mode 1), consumption abroad (Mode 2), foreign direct investment (Mode 3) and the movement of labour (Mode 4). The members are under no obligation to make commitments in all of the modes or in all the sectors. They are free to make commitments in all the four modes in a particular sector, or selectively choose among them in the chosen sectors.

Considering that services constitute the most important sector, not only in developed countries, but also in many developing countries, the inclusion of this sector was imminent, sooner or later. The share of services in GDP, on an average, is now more than 70% in developed countries and more than 50% in developing countries. Moreover, the developments in the field of information and communication technology (IT) in recent years have expanded the range of services that can be traded internationally. Many of the services that were considered non-tradable till recently, are now actively being traded; though much of this started picking up since the mid-1990s, just after...
the signing of the GATS. Thus, the inclusion of services in the GATT framework was not necessarily against the interest of developing countries as it was feared. However, developing countries had little understanding on any new issues that have been brought into the GATT/WTO. As a result, the way it was framed was primarily to serve the interests of developed countries only.

Members’ specific commitments vary widely in sectoral coverage, extent of limitations to market access and national treatment and modes of supply coverage. In general, there is a correlation between the degree of development of the services sector and the coverage of the sectors offered.

In the scheme of liberalization of trade in services, the emphasis of most commitments put forward by all countries is on commercial presence mode of supply, followed by movement of natural persons. However, even though, the movement of natural persons is allowed in almost all sectors, they are linked to intra-corporate transferees and movement of highly skilled professionals. The bindings undertaken for Mode 2 are quite liberal. However, the commitments in Mode 2 is hardly of any use as governments may have few instruments to prevent their nationals from moving abroad for procuring services or to influence their consumption once they have left the country. It is quite an irony that Mode 1 commitments could be the least liberal, considering that this is the only mode that involves “trade in services” in purely conventional sense. Strictly speaking, if commercial presence is considered a form of trade, then all FDI projects are also a form of trade. Until recently, most developing countries were not in a position to benefit from the commercial presence mode of supply, given the high cost of establishment in developed countries and the weaknesses of developing countries’ firms in terms of financial and human capital, technology and so on. For the same reasons, developing countries are not able to make use of Mode 1 even when delivery of some services is technically feasible, as developed countries require commercial presence for providing these services. If trade in services is to be genuinely promoted, then Mode 1 needs to be encouraged the most.

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About TERI
A dynamic and flexible not-for-profit organization with a global vision and a local focus, TERI is deeply committed to every aspect of sustainable development. From providing environment friendly solutions to rural energy problems, to tackling issues of global climate change across many continents and advancing solutions to growing urban transport and air pollution problems, TERI’s activities range from formulating local and national-level strategies to suggesting global solutions to critical energy and environmental issues. With staff of over 700 employees drawn from diverse disciplines, the institute’s work is sponsored by ministries and departments of the government, various bilateral and multilateral organizations, and corporations of repute.

About GALT
The Centre for Global Agreements, Legislation, and Trade (GALT) is an area within the Resources and Global Security Division of TERI. The broad objectives of the area are:

- To engage in research on trade, investment, resource development and use, and sustainability issues from a multidisciplinary perspective;
- To engage in capacity-building through training programmes, workshops, and seminars;
- To create awareness through an effective dissemination of knowledge and dialogue amongst policy-makers, academia, practitioners, and other stakeholders.
Trade in energy and environmental goods and services: various facets

Anandajit Goswami and Saswata Chaudhury

Background
Trade in energy and, environmental goods and services has emerged as an important issue of discussion at multilateral, plurilateral, bilateral and unilateral discussions. Debates on trade in energy and, environmental goods and services started in 2002. A major point of discussion was on the definition of “energy and environmental goods and services”.

Paragraph 31 I and 31 III of the GATT document discusses environmental goods and services. Many of these goods and services have dual applications. Several countries within the multilateral platform have come forward with individual proposals on energy and environmental services linking environmental goods for consideration in the trade regime.

Focussing on the history of evolution of negotiation in environmental and energy goods and services, the article discusses the nature of these goods and services along with the challenges and, opportunities associated with its trade. It concludes with the areas of concern in trade negotiations in energy and environmental goods and services in order to forge a way forward towards future energy and service negotiation.

History
Energy and environmental services are connected to the list of energy and environmental goods. Different set of lists have been put forward by developed and developing countries. In environmental goods, developing countries voiced for a project based approach whereas the developed countries opted for a list based approach.

From 2002 to 2005, individual lists on environmental and energy goods services linked with environmental, energy goods have been tabled by nine member countries. Subsequently, technical discussions were held and in 2007, a list of 153 items was proposed.

During 2005–2007, India, Brazil and Argentina tabled alternative proposals. As a follow up, in 2008, a work programme was started which was followed by a revised work programme in 2009. Since then, new issues have been consistently identified by members.

Discussions have moved forward mostly in context of goods identification and determination of modalities. Nine countries have tabled their proposals in the list based approach. Brazil has put forward requests and offers whereas Argentina tabled an integrated approach. China suggested for setting up a “development list” and a “common list”. The common list will include consensus based environmental goods. Members will be committed to reduce and eliminate the tariff and non-tariff barriers in these goods. The “development list” will include some of the products selected by developing and least developed countries. These goods can also belong to the “common list” and will have a lower level of tariff and non-tariff barrier reduction commitment.

The identification exercise for environmental goods started in the year 2005. Nine OECD countries first identified environmental goods. In 2009–2010, Saudi Arabia, Qatar, Japan, Argentina, Philippines, and Singapore brought additional submissions. Plurilateral requests on energy and environmental services were made by US, EU, Norway, Australia, Japan, Canada, Korea, Switzerland, Taipei, and Singapore.

Poland, Liechtenstein, and Switzerland excluded natural resources from their list of energy services. Croatia and Hungary did not define any market specific conditions for enhancing market access for crude, refined petroleum, and for transportation of petroleum products through pipeline. Australia, Hungary, Austria, EU, Finland, Republic of Korea, Sweden, and Singapore mentioned sector specific restrictions in consulting services. In environmental services specific to certain environmental goods, Australia and Hungary suggested environmental goods identification specific to consultancy services.

The European Union proposed specific services based on fee or contract basis in the fields of oil and gas incidental to mining. Strong plurilateral requests related to energy services associated with the mining
sector emerged from Australia. Plurilateral request of Australia did not include—water purification for human use (dealing with collection, processing, purification and distribution of natural water).

History of trade negotiation regime in environmental services indicates that Australia has been seeking access for exporting these services in the East Asian region. Market access also has to ensure that the quality of services is monitored and maintained. Moreover, the qualification of service providers of energy services in the East Asian region have to be ensured and checked through domestic regulatory measures. One of the domestic regulatory measures, controlling market access of firms in Australia, has been through the guidelines of Australia’s foreign investment policy, foreign acquisition and takeovers Act of 1975.

It is necessary to meet the guidelines of Australia’s foreign investment policy for market access through equity investments in Australia, and equity returns to service providers through Foreign Direct Investment (FDI). These guidelines are valid for foreign owned/controlled enterprises that have been established in Australia. It is mandatory as per the regulation to have an Australian citizen present in the board of directors.

The mentioned chronological highlights of the negotiation trend and facts in environmental goods, services in WTO opens up further questions on the nature of goods under negotiation. In these negotiations, one has to see how a commodity qualifies to be an environmental good and how trade modalities in this commodity has to be developed for consideration of negotiation in the multilateral platform of WTO.

What is the nature of environmental goods
The kind of goods that have been identified in the list of environmental goods range from renewable energy to waste management, air pollution control, environmental technologies for conservation, monitoring, analysis and assessment.

Products dealing with energy efficiency, carbon capture and storage, efficient consumption of energy, biofuels, and organic substances are also listed as part of these environmental goods. US and EU proposed that environmental goods identification should be done on the basis of the list of 43 items provided by the World Bank. Japan has mentioned about energy efficient climate mitigation goods like LEDs whereas Argentina highlighted that goods can be classified and identified in a project specific way as per the norms of CDM project.

Energy services deal with service provisions for various energy goods like crude oil, petroleum and natural resources that are mined. However, in the list of these environmental goods, a problem that has been identified is of dual usage which has further led to the problem of overlapping of relevant environmental and energy goods. The wide spectrum of definition of an environmental good has only added to the confusion.

Problem of dual use in the environmental goods
Some of the products mentioned in the list of environmental goods like wind turbines, solar water heaters, biogas production tanks and methane collection liners have overlapping dual usages. Challenges faced in this area are: a) lack of definition of environmental good, b) technological evolution, c) technical issues of tariff classification.

There is also a need to decide on how and over what timeframe the tariff liberalization will happen. Moreover, which products should be exempted needs to be decided as well. Brazil in this aspect proposed that individual members should have their own flexible list on the basis of bilateral negotiations.

These dual, multiple and overlapping usage problems have necessitated the need for defining environmental service properly. The nature of an environmental service can be very specific to the type of the environmental good that is under consideration. The following section skims through a volley of negotiations regarding definitional aspects of environmental services.

Environmental Services
The W/120 list broadly classifies the environmental services into: (1) sewage service (CPC 9401), (2) refuse disposal services (CPC 9402), (3) sanitation and similar services (CPC 9403), and (4) other environmental services including cleaning of exhaust gases (CPC 9404), noise abatement (CPC 9405), nature and landscape protection services (CPC 9406) and other environmental protection services (CPC 9409). Environmental services to a large extent comprises services relating to pollution management, related construction and installation facilities, and services pertaining to installation and utilization of technologies, products which minimize pollution and resource use and/or reduce environmental risk. This raises the concern of some overlap between energy and environmental services.

In spite of the overlap, services related to environment are found to be relevant in context of identification of
Energy Services

Energy services follow a codification norm suggested by the Central Provincial Classification of United Nations. The classification exercise done has various classes and subclasses. According to such classification, the “transportation of fuel” comes under the broad category of transport services. “Services incidental to mining”, comes under the category of “other business services” and relates to upstream activities for oil and gas.

Several services dealing with drilling, derrick building, repair and dismantling, oil and gas well casings, and cementing came under the purview of services which are being rendered through a fee and contract basis. The list of energy services also include - mineral prospecting services, oil and gas field exploration, seismic, geological surveying services, geological, geophysical and other scientific prospecting services, engineering related scientific and technical consulting services.

The class “transportation via pipeline of crude or refined petroleum and petroleum products and of natural gas” defined by the Central Provincial Classification (CPC) falls under the subclass 71310 of the energy service codification system. In the CPC classification, “services incidental to energy distribution” comes under the classification CPC 88700. This classification directly addresses energy distribution.

Different blocks of countries from developed and developing groups have initiated proposals on definitional aspects of energy services. Energy services comprises several services like equipment, transportation, architectural and engineering, technical consulting, construction, financial, scientific, and wholesale and retail trade services with respect to environmental, fuels and energy goods.

Most proposals on energy services have been dealing with the upstream segment.

The proposal Norway put forward on energy services encompasses entire value chain of energy starting from mining, production, transportation and its final distribution. Canada proposal concentrated on upstream, whereas Chile’s proposal focussed on downstream segment.

However, the trade in these goods and services will be guided by the level of bound tariffs that have been high for environmental and energy services. High bound tariffs in these goods and services can act as a barrier. Other than this, several other challenges pertaining to energy and environmental service liberalization have been faced that have been described below.

Challenges

Service negotiations have followed laid down principles of GATS. Developing countries have been trying to negotiate towards trade in energy services in a way such that participation of domestic firms in value chain of energy services is maximized.

A major part of energy services are still guided by trade in goods and GATT principles. For instance, a good like coal involves least amount of services and is largely being driven by trade in goods. But, there are establishments that undertake coal mining and preparation services for others on a contract or fee basis.

So, in these cases the basis of energy service trade is yet to be determined. Practical problems are being faced owing to non exhaustive classification of energy service sector. Energy service comprises a chain of interrelated activities and sectors. For a fair trade in an energy service, a supplier will require market access in all the interrelated services and sectors. Many of these interrelated services and sectors are spread throughout the classification system. So any access for a given energy service will depend on the nature of the market access in all interrelated services and sectors. But the actual access in the interrelated services will be difficult to determine. This can create unpredictability regarding the real level of access in any energy service.

Negotiations in other sectors can also have an effect on the service sector negotiations as many of the sectoral

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classifications are too broad. For instance, sectors like “architectural services”, “engineering services”, “management consulting services”, “installation work”, and “wholesale trade services” are very broad in nature. Negotiations in these sectors which have interlinkages with the overall energy service sector value chain can have repercussions in “energy service” trade between countries.

In spite of these challenges the energy service sector also offers certain opportunities.

Opportunities
A well laid out negotiation can open doors for domestic service providers. But it varies across countries with different paradigm of interest. On basis of interest, the countries may be classified in three broad groups, viz., developed countries (which have affordability to buy energy products and services), energy exporting developing countries and energy importing developing countries. Not only the interest varies across these groups, sometimes it is conflicting among them. For example, Venezuelan proposal on energy services strives for increasing participation of domestic service providers in foreign markets to enhance market access. But it may not be suitable for other developing countries based on their own resources and infrastructure facilities. However, energy service negotiations by developing countries have to be done in a way so that it enhances the market access of developing countries in developed country markets. However, it cannot be done smoothly. Frictions are already there in the energy services negotiations between developed and developing countries. Developed countries in many cases are bargaining hard to use energy service negotiations as a leverage to get a market access in the developing country markets.

In this context the following areas of concern highlighted in the next section have to be noted to forge a way forward in the domain of multilateral trade negotiations in energy and environmental services.

**Areas of Concern**
Proposals from developed countries, like the US strictly seek broad market access and national treatment commitment from member countries. These proposals have highlighted the entry of specialised personnel with skills for delivering energy services and thereby helping in smooth flow of electronic transaction, information through tariff elimination on goods related to energy.

Moreover, opening of energy service related activities to foreign firms providing services dealing with wholesale marketing of energy goods have been mentioned. Developed countries have highlighted about existing energy monopolies, application of GATS rules in these monopolies and are seeking support for countries towards scheduling national treatment, market access and non discriminatory measures.

European countries through plurilateral approach are pushing for access in all sectors and subsectors using all forms of modes of trade in energy services. Services encompassed in these proposals include exploration and production; construction of energy facilities, networks, storage; supply; services for final use; decommissioning; and other energy-related services, such as installation, maintenance and repair of energy equipment. Many of the services cover from Mode-1 to Mode-3 of services.

The EC proposal also highlights on how movement in natural persons through the Mode-4 route of trade in services should be checked to facilitate movement of contractual suppliers within countries.

Canada has been seeking market access in the upstream segment dealing with oil and gas services through all four modes of services. It has requested for larger commitments from all WTO members including developing countries in four modes of services in the upstream segment dealing with oil and gas services.

Specific subsectors mentioned in developed country proposals include real estate services, rental/leasing services, scientific and technical consulting services, resource identification, production, transmission, transportation, distribution, and sales and marketing. Additionally, engineering services, computer and related services, R&D services, management consulting services, wholesale trade services have also been mentioned.

In contrast, developing countries like Venezuela have suggested that nature of energy services (viz. core and non-core) should be defined on basis of what energy sources are used for provision of such energy services. Further, based on source of energy services, core and non-core energy services have to be further laid out. Core energy services will include range of upstream services related to discovery and development of energy resources. Downstream services would deal with establishment of various construction, process, operation and maintenance facilities that can help in the discovery, processing and distribution of energy services sourced from different forms of energy resources.
As these strategic core and non-core sectors contribute to overall development of developing nations, the nature of negotiations in these sectors will be important. Negotiations in these strategic sectors would have to ensure that protection to domestic firms in the form of subsidies is given. Such concerns have been reflected in Chile's proposal. Any opening up of a sector, subsector through various modes of services should not mean dominance of some firms leading to withering of market share of domestic firms of developing countries. This should also be guided by domestic set of sector, sub sector specific regulations of the countries in negotiation.

Finally, energy and environmental service sector negotiations have to comply with the Article XIX, Article IV of GATS complemented by fair, equitable technology transfer regimes. A way forward to create an equitable trade regime in energy and environmental services have to internalize equitable technology transfer and market access principles to address fair trade goals and development concerns of developing countries.

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Trade in IT and ITES: an Indian perspective

Souvik Bhattacharjya and Nitya Nanda

Introduction

India's information technology (IT) and IT enabled Services (ITeS) over the years have emerged as key economic sectors. The sector was deregulated in the 1990s in order to facilitate private-sector participation and 100% foreign direct investment is allowed through the automatic route. The industry's revenue has increased from US$ 4.8 billion in 1997-98 to US$ 70.5 billion by the end of fiscal 2009-2010 with annual compound growth rate of 25.1%. Out of this, 50% is contributed by IT services, followed by ITeS BPO (20%). The software products and engineering services contribute 17% while the hardware sector contributed 13%. The industry's contribution to GDP has also increased from merely 1.2 per cent in 1997-98 to 4.8 per cent in 2004-2005 and 6.1 per cent in 2009-2010. Employment opportunities have emerged strongly. The total IT software and services employment approximately reached 2.29 million in 2009-10 (excluding employment in hardware sector), while the industry employed around 2.20 million in 2008-09 thus making a net addition of 90,000 professionals to the industry. The indirect employment attributed to the sector is approximately 8.2 million. The industry also has been partially successful in bringing diversity at various workplaces. Currently, over 30% of employees are women, and over 60% of the industry players employ people with various disabilities (IBEF 2010). (Department of IT, 2010).

The role of information technology in trade, however, goes much beyond the export of IT services as such. The developments in the field of information and communication technology (IT) in recent years have expanded the range of services that can be traded internationally. Many of the services that were considered non-tradable till recently, are now actively being traded. In that sense, IT has been a game changer in the context of trade in services. For example, India was strongly opposed to inclusion of services in the GATT/WTO framework of trade in the Uruguay Round of trade negotiations as much of this started picking up since the mid-1990s, just after the signing of the GATS. But now India is one of the strong advocates of liberalization of trade in services.

Factors affecting growth

The growth in the industry is attributed to different factors. India has a presence of highly skilled human resource, with low wage structure compared to other countries and also conducive government policies. Indian IT and ITES companies have been expanding their service offerings across the value chain, thus enabling their clients’ to strengthen and deepen offshore business activities and also help in shifting from low to high end business processes. Indian companies are enhancing their delivery capabilities through Greenfield investments, cross-border mergers and acquisitions, as well as forming partnerships with local players. At the same time, Indian IT companies are increasingly improving their internal processes and practices and aligning them with international standards like the Capability Maturity Model (CMM), International Organization for Standardization (ISO), Six Sigma and Lean Six Sigma - a concept recently developed that combines ‘six sigma’ ideas with lean manufacturing. This has helped establish India as a credible sourcing destination. As per 2007-08, there were over 500 India based centres (Indian firms and MNC owned captives) who have acquired quality certifications with 85 companies certified at Software Engineering Institute (SEI), Carnegie Mellon Capability Maturity Model (CMM) Level 5 (Department of Information Technology, 2010).

The key services sectors serviced by the industry are banking, financial services and insurance, technology (particularly telecommunication) that account for approximately 60% of the total service provided. Other growing application includes manufacturing, retail, media, utilities, healthcare and transportation (Chanda, 2008).
India’s export of IT and ITeS

Over a period of time, India also has emerged as a major global sourcing base in IT and ITeS segments and is expected to continue to fuel the global growth in IT industry. The industry’s total exports account for two thirds of the total revenue. Exports have significantly increased over the last 10 years. In 2000, the sector’s total exports were estimated to be around US$ 4 billion and this has increased by more than 10 times in the last ten years. The industry’s current share in India’s total services exports stands very high at 60%. Export in IT services has the highest share followed by ITeS-BPO and computer hardware. As per the 2008-09 estimates, within IT services, export share under application development had the highest share of 37.5% followed by information sources (IS) outsourcing 15.9% and application development 14.2%. Other IT service exports included software testing, deploy and support, system integration and IT consulting (Chanda, 2008).

Although India’s IT and ITeS exports may have grown significantly over the years yet export has been concentrated only in few countries. Export destinations have been limited only to the US and selected countries of European Union (EU). US is the most important market for India’s IT and ITeS and the country accounts for more than two-thirds of total exports from India. UK, is the second most important destination and accounts for 14% of the total exports. Finally EU (excluding UK), accounts for 10% of the exports from the sector, thus making EU the second most important destination with share approximately around 24%. The other destinations include Japan (1%-2%), and other parts of Asia. In the coming years, the Gulf and the Asia-Pacific region are expected to play a key role in the development of India’s IT-ITES firms (IBEF, 2010), (Department of Information Technology, 2010).

Foreign Direct Investment

As per the latest policy of the government, 100% foreign direct investment is permitted in the electronic hardware sector and the software development sector under the automatic approval route. Industrial licensing has been virtually abolished in the electronics and information technology sector except for manufacturing electronic aerospace and defence equipment. The sector has experienced steady increase in the inward foreign investment in India’s IT and ITeS sector. India’s technology sector witnessed mergers and acquisitions deals worth US$ 1.7 billion in 2009-10. The IT-BPO sector of India has also attracted one of the highest shares of private equity (PE) and venture capital (VC) investments in the country. Cumulative FDI inflow in the computer software and hardware sector has been estimated at US$ 10,406 million between April 2000 and September 2010. The technology sector experienced FDI inflow of US$ 1,410 million in 2007–08, US$ 1,677 million in 2008–09 and US$ 919 million in 2009–2010. The recent fall is attributed to the financial crisis that hit the global economy (DIPP, 2010), (CCI, 2008).

Though FDI in the IT sector might have helped India in its efforts toward export of IT services, it is even more important to note that Indian IT companies invested abroad which is Mode 3 type of services trade in the GATS context. During the three decades beginning in the late 1960s, more than 80% of Indian FDI was in the manufacturing sector. However, in the 2000s, there was a notable diversification in the sectoral/industry composition of overseas activities of Indian firms. The share of manufacturing in total approved capital declined from 72.3% in 2004–2005 to 43.7% in 2007–2008. Such diversification could be possible due to massive increase in outward FDI in IT sector. In fact till about 2007, IT was among the most important sectors for Indian outward FDI. Since then, however, there have been a couple of big foreign investments outside India in the manufacturing sector, but IT continues to be important. Moreover, earlier Indian outward FDI was concentrated in developing countries in Africa and Asia; contemporary FDI flows from Indian firms have been directed more towards the developed countries. Between 2001 and 2005, the US, Russia, Sudan, Australia, the UK and Singapore stand out as the favoured destinations for Indian companies. Of course Indian IT companies such as the Tata Consultancy Services (TCS) and Infosys are
establishing major global sourcing bases in developing countries like China and Brazil apart from the US and Europe (Hattari and Rajan, 2010). It may also be noted in this context that such outward FDI in the IT sector also helps Indian companies increase their exports of IT and ITeS through mode as well.

Innovation in IT industry in India

In recent times, the IT industry in India has been investing significantly in order to move up the value chain. As mentioned above, more and more companies are focusing on innovation and providing high-end services to different sectors in the economy, rather than just supporting traditional services. India is increasingly becoming a strong force in global patent creation and its exports in the engineering and R&D, offshore product development and indigenous software products segment of the industry are experiencing very high growth. According to recent study conducted by NASSCOM, it was estimated that the Indian IT-BPO companies spent $450 million on R&D activities in the fiscal year 2009 (NASSCOM, 2009). In recent times studies have shown that such increase in R&D expenditures by domestic companies are associated with significant rise in average export earnings (Majumder, 2010). At the same time, India is also at the forefront of drawing R&D investments in the country from global IT players. India is drawing 25% approximately of the fresh global investments in R&D centres. These investments are a big chunk of the inward total FDI in India’s IT sector.

Policy and regulatory environment

The nodal department under which the formulation, implementation and review of national policies in the field of information technology including hardware and software is carried out, is the department of information technology. The department is under the Ministry of Communications and Information Technology. Some of the key polices to promote the IT services industry in India is given below:

Software technology parks of India

India’s major policy intervention in the sector was during the early 1990s when India was actively adopting economic liberalization polices. A major intervention was the establishment of an autonomous agency called Software Technology Parks of India (STPI) to manage the software technology park scheme in India. The services provided by STPI for the software exporting industries are statutory services, data communication servers, incubation facilities, training and other value added services. The agency has played a key role in the promotion of software exports with a special focus on SMEs and start-up units. Currently, there are 51 STPI centres, with over 8,000 registered units, which have been set up since the inception and have given a major boost to exports from the industry. Total exports from STPI registered units in 2008-09 were estimated at Rs 2,15,571 crore which is approximately 90% of total software exports from India (Department of IT, 2010).

Information Technology Act, 2000

Following the UN resolution that adopted the Model Law on Electronic Commerce, the Government of India passed the Information Technology Act 2000 in May 2000 and notified it for effectiveness on October 17, 2000. The Act provides a legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as “electronic commerce”, which has evolved as alternatives to conventional paper-based methods of communication and storage of information. The key issues addressed by the Act include:

Table 1 Key benefits under STP scheme

| Income Tax benefits under Section 10 A & 10 B of the IT Act upto 31st March 2011. |
| Customs Duty Exemption in full on imports. |
| Central Excise Duty Exemption in full on indigenous procurement. |
| Central Sales Tax Reimbursement on indigenous purchase against from C. |
| 100% FDI is permitted through automatic route. |
| Sales in the DTA up to 50% of the FOB value of exports permissible. |
| Use of computer imported for training permissible subject to certain conditions. |
| Depreciation on computers at accelerated rates up to 100% over 5 years is permissible. |
| Computers can be donated after two years of use to recognized non-commercial Educational Institutions/ Hospitals without payment of duty. |
| Export proceeds will be realized within 12 months. |
| Units will be allowed to retain 100% of its export earnings in the EEFC account. |
legal recognition of electronic documents;
legal recognition of digital signatures;
offenses and contraventions; and
justice dispensation system for cyber crimes.

Special Economic Zones (SEZ) Scheme
The Government of India enacted the Special Economic Zone (SEZ) Act in 2005, with an objective of providing a globally competitive and hassle free environment for exports. It provides drastic simplification of procedures and a single window clearance policy on matters relating to Central and state governments. Units under SEZ enjoy special benefits to those under STPI in respect to indirect taxes and income tax holiday. There is 100% exemption of export profits from income tax for the first five years, 50% for the next five years and 50% for the five years subject to transfer of profits to special reserves. The government has also formulated incentive packages to set up a semiconductor fabrication unit in 2007. The scheme encourages foreign investment in the hardware production segment and provides strong policy structure to attract capital. It provides a capital subsidy of 25% for 10 years to set up fabrication facilities and other high-end manufacturing units outside SEZs, and 20% in SEZs, with exemption from countervailing duty (CVD) of 16% on capital goods. The package proposes a minimum investment of US$ 200 million for semiconductor manufacturing (wafer fabs) plants and US$ 100 million for ancillary plants. (Department of Information Technology, Government of India)

WTO-GATS Services Negotiations
India’s negotiations under the General Agreement on Trade in Services (GATS) of the World Trade Organization (WTO) are under process with India submitting requests to the other WTO members. Key objectives of the negotiations have been towards liberalization for market access and non-tariff barriers to trade, permitting foreign direct investment, introducing simple and flexible visa regime enabling easy movement of professionals for rendering various services. As noted before, India has become one of the demanders of liberalized services of the trade regime. However, there is a difference between the ways in which India wants such reforms to take place. India’s focus is more on Mode 1 and Mode 4 as against the most developed countries that tend to concentrate on Mode 3. It is noteworthy that India’s demand, particularly in the context of Mode 1, is more in tune with trade in services rather than investment in services. Although the negotiations in all the service sectors are still in progress, there is much uncertainty about the time by which the same will conclude. Meanwhile, India has also engaged in bilateral arrangements for greater market access for its IT services. Notable is the trade agreement with Singapore that includes services as well. Such agreements are being negotiated with ASEAN and EU was well.

Future prospects of India’s IT and ITeS industry
India’s ITeS is expected to grow significantly over the years with the global growth in engineering, knowledge and legal process outsourcing. Engineering Process Outsourcing (EPO) market size is estimated to touch US$ 30 billion annually by 2015, attracting 25% of the US$ 70-billion global EPO industry (IBEF, 2010). The key services would include engineering and designing solutions for various industries like telecommunications, automotive, construction, aerospace, utilities and industrial design.

The KPO industry is growing rapidly. Currently, India’s KPO export market constitutes around 8 per cent of the country’s ITeS revenues and employs nearly 3 per cent of its workforce. The growth is expected to continue with the support of skilled human resources and outsourcing activities of knowledge processes. The outsourcing of legal and intellectual property research also holds tremendous growth potential. It is estimated that India’s current share of 3%-4% in the global LPO markets is expected to rise to 6%-7% in the next three to five years.

However, in order to tap the above opportunities, India needs to strengthen its Research and Development. Currently, IT development is concentrated in a few cities only. In order to bring in more trained and educated human resource pool, the IT industry needs to cross the existing boundaries and reach tier-II and tier-III cities in India. These initiatives coupled with strong domestic policies will definitely place India’s IT sector at a new trajectory of sustained high growth.

On the demand side, India’s challenge is to ensure that its trading partners adopt more liberalized services of the trade regime and provide better market access particularly through Mode 1 and Mode 4. Such reforms will lead to higher exports of ITeS as technological changes will make it possible for cross-border transaction of services where India has advantages. Apart from the commercial presence and issues like economic needs test (ENT), there are also issues like

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recognition of Indian standards of professional services by its trading partners.

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DR Negotiations and the DDA: stocktaking of the GATS negotiations

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Introduction
The Doha Round of trade negotiations is still an open question even after a decade has passed by since its launch. The legitimacy of the institution of WTO (which has successfully and ably served the cause of maintaining the global trade order for nearly 70 years now) is under the scanner. According to experts, the uncertainty is so high that trade negotiators are now looking at possible options if Doha fails to materialize. Thus, and notwithstanding the political posturing, not all is well in the current round of multilateral trade negotiations. And irrespective of what is put out in the public domain, the fact remains that the cause for the stalemate in Doha Round has been caused by a double-whammy of ever-changing expectations of key negotiating partners coupled with their ever-diminishing ability and inclination to make the necessary concessions for sealing the Round.

It is in the above rather bleak context that this paper attempts to evaluate the progress of negotiations in the Domestic Regulation (DR) Disciplines under the GATS negotiations of the Doha Development Agenda (DDA). An ambitious outcome in the DR aspects of the services negotiations would be consistent with the overall direction of policy and regulatory reforms already undertaken by WTO members, largely as unilateral measures, as well as in response to earlier sectoral negotiations in the Uruguay Round of trade talks. Bilateral and regional agreements on services very often reflect significant liberalization and openness, but by nature they are designed to be discriminatory with respect to the non-FTA members.

This stocktaking paper introduces the GATS negotiations in the DDA, with special focus on the DR Disciplines negotiations followed by an assessment of the recent developments in DR negotiations and its implications for India.

GATS negotiations and the DDA
Multilateral negotiations on services began during the Uruguay Round, which also led to the signing of the GATS in 1995, by which the members undertook some initial (albeit limited) commitments to liberalize services trade in key sectors. The GATS is the first and the only set of multilateral rules covering international trade in services, spanning across 12 main categories and over 160 sub-categories, constituting of financial and business services, social services including education and health as well as travel, tourism and transportation services among others. The GATS mandates WTO member governments to progressively remove entry barriers to trade in services, i.e. it follows a ‘positive list’ approach to liberalization, through successive rounds of negotiations. Article XIX of GATS required members to launch new negotiations on services no later than 2000, and periodically thereafter. Initial negotiations were thus launched in the year 2000, which later became part of DDA. Between 2000 and the end of 2005, WTO members pursued a bilateral request-offer (R-O) approach to negotiations.

The focus of negotiations being mainly on market access, the Doha Ministerial Declaration had established the original timeframe of June 30, 2002 for the circulation of initial requests and March 31, 2003 for the submission of initial offers, with all negotiations to be concluded no later than January 1, 2005. In the aftermath of the failure of the Cancun Ministerial Meeting in September 2003, the R-O process of services negotiations virtually came to a halt. The July Package of 2004 urged member countries yet to submit initial offers to make a submission at the earliest. In addition, the Package included directives to ensure higher level offers, intensify efforts to conclude rule making negotiations under Articles VI.4, X, XIII and XV in accordance with their mandates and deadlines and provide targeted

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The section 2.1 in this paper is based on the analysis in an earlier research undertaken by this author for the Trade Policy Division, Department of Commerce and Industry, Government of India.
technical assistance to developing countries with a view enabling them to participate effectively.

At the Hong Kong Ministerial Conference in December 2005, the target date of July 31, 2006 was established for second revised offers on services market access. In 2006, WTO members also launched an effort to complement the bilateral request-offer process with a plurilateral or “collective” approach. The latter involved subsets of the WTO membership seeking to agree to a common “minimum” set of policy commitments for a given sector. But even with the new approach not much progress has been achieved until now, as large asymmetries in interest across membership impedes the progress.

Until the Hong Kong ministerial conference there were 69 initial offers and 30 revised offers. Since then these have increased to 71 initial offers and 31 revised offers. However, these new offers have largely been in the same sectors covered in original commitments. Also many experts argue that the quality of offers is poor. Recent research indicates that the Uruguay Round commitments are on average 2.3 times more restrictive than current policies. Currently, Doha offers improve GATS commitments, but at this stage the gap between offers and actual policy is still large. Doha offers are on an average 1.9 times more restrictive than the actual policies.¹

But still gaps remain, though there is a reasonable prospect that offers will be improved. To expedite the process, on July 26, 2008 a “Signalling Conference” was held among ministers from 31 countries to gauge progress in the request-offer negotiations. This plurilateral engagement at the ministerial level did transmit some “signals” regarding expanding respective offer coverage (mostly in infrastructural services and, in some cases, professional services). Members did also express willingness to close the gap between their applied and commitment regimes.

Negotiations on DR Disciplines and India’s Stakeholder Concerns

Though market access remains the main pillar of the DDA negotiations, an important element of the GATS negotiations in the current round has been the negotiations on services rules, and in particular the negotiations on the disciplines on Domestic Regulations as mandated under GATS Article VI.4.

¹ Gootiiz and Mattoo, 2009.
Negotiations on Trade in Services states that “members shall aim to complete negotiations under Articles VI:4 . . . prior to the conclusion of negotiations on specific commitments” under GATS Article XIX. Thus, under the Doha Development Agenda and subsequently the 2004 July Framework, it had been decided to include negotiations on rule-making under GATS Article VI:4 as a part of the single undertaking programme, which the mandate under paragraph 5 of Annex C of the Hong Kong Declarations reiterates.

In DR disciplines, positions have been debated the most and negotiations have also seen much progress. A draft text was circulated as early as 2006 for the members to deliberate on, and India has been a major proposer and discussant in the DR Disciplines negotiations. In view of clear Mode 4 linkages under Article VI:4, the discussions relating to disciplines on DR has important implications for India’s service exports looking for higher and more comprehensive commitments from trading partners in the market access negotiations especially under Mode 4. Given the scheduling flexibilities allowed under GATS, DR disciplines on the qualification and licensing requirements remain the only other mechanism to knock down arbitrary and stringent entry barriers and improve effective market access for developing country service providers. In recognition of the above, India has made several submissions to the working party on domestic regulation (WPDR) wherein the focus has been on disciplines on qualification requirements and procedures, which would complement the market access interests of developing country service providers.

A survey of the Indian regulators and stakeholders on their expectations and concerns from stronger DR disciplines in the GATS indicates that while the regulators are still apprehensive of losing regulatory flexibility and the related development and sovereignty issues, service providers are strongly in favour of the incorporation of some sort of horizontal disciplines to reduce market access uncertainties and procedural requirements for sectors where specific commitments have been taken, especially vis-à-vis Mode 4 access. In certain professional and business service sectors, stakeholders and experts are debating whether special sectoral agreements or scheduling can be used to set out additional transparency requirements for individual sectors, including broader regulatory reform as is necessary and appropriate. Some sectors may need little supplementation, while other sectors may need many special rules tailored to that sector. The approaches (covering standard-setting, including prior consultation and harmonization; the regulatory application process; desired scope and elements of the proposed disciplines; and judicial, arbitral or administrative tribunals) as suggested in the position papers on Domestic Regulation by WTO members, UNCTAD as well as by several GATS experts, aim to allow negotiators to respond flexibly to the particular needs of each sector while at the same time building on the transparency disciplines that apply across all sectors.

A perusal of the measures requiring action by WPDR as highlighted by members clearly indicates that there are issues in domestic regulatory requirements in member countries which impede effective liberalization of trade in services even in sectors where members have scheduled commitments, which heightens the need for expedited development of disciplines on DR, and in particular for professional services. It appears that effective liberalization of internationally traded professional and business services would entail imposition of regulatory disciplines and reforms of the internal legal systems in member countries, for ensuring compliance with the GATS approved requirements of:

- Legitimacy, necessity, and proportionality (Article VI:4 - the need for domestic regulation to be no more trade restrictive than necessary); and
- Consistency with GATS requirements on market access (Article XVI) and national treatment (Article XVII).

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2 S/L/93, adopted in the Special Session of CTS, dated 29 March 2001; emphasis added.
3 Karmakar, 2007
4 For example analysts like Joel P Trachtman, Aaditya Mattoo, Pierre Sauvé, Markus Krajewski, Joost Pauwelyn, among others have outlined different approaches of DR Discipline that allow sectoral flexibility while at same time reducing the arbitrariness of DR and improving transparency.
5 Annex 1 of JOB(02)/20/Rev.7, dated 22 September 2003: Examples Of Measures To Be Addressed By Disciplines Under GATS Article VI:4, Informal Note by the WTO Secretariat.
6 As mandated under Para 2 of Document S/L/63
7 This view is based on reports of positions taken by stakeholders and professional organizations in different member states (as posted in various internet sites) and from the author’s interviews with Indian service providers in different professional and business sectors, who largely support these positions taken on different elements of disciplines that have been proposed.
Recent developments in DR disciplines negotiations

On domestic regulation, as noted by Ambassador Mateo in his Report to the TNC, recent intensification of negotiations has produced notable progress, even if disagreement persists on important and basic issues. Since the beginning of 2011, members had been engaged in intensive drafting sessions with the aim of producing a revised text by April in 2011. Considerable efforts were made to reduce gaps, and where this was not yet possible, an attempt was made to isolate differences by introducing brackets into either the paragraphs of the Chair's March 2009 text or in an alternative language proposal. A key point in the intensification of the process was the “sweeping exercise” of 10th and 11th February 2011, in which members undertook a paragraph by paragraph reading of the draft provisions contained in the Chair’s March 2009 text and related proposals. Following the “sweeping exercise”, which saw a reduction in the number of language options, three separate weeklong intensive drafting sessions were organized to further resolve differences regarding the content and levels of ambition of the various provisions.

However, by the end of the week of April 4, 2011 it was evident that some distance still needed to be covered in order to produce a revised text. More time was also needed, as not all the provisions of the draft disciplines were given a final consideration during that week. The current situation, following the conclusion of the drafting sessions, was characterized by the WPDR Chair as one where the various paragraphs of the draft disciplines could be said to be at different stages of progress. In addition, the question of whether a normative standard in the form of a “necessity test” should be included into the disciplines remained unresolved. Those paragraphs that were not revisited during the week of April 4 are those in the “introduction”, the chapter on “technical standards”, as well as the proposal for an additional paragraph in the “development” chapter. With respect to technical standards, a key question that remains to be resolved is whether voluntary standards fall within the scope of the disciplines and if so, how the members can effectively discipline action by private actors outside the overall scope of GATS. For the development chapter, there are proposals for transition periods as well as other development-oriented measures. The Chapter XI on “institutional provisions” has not been discussed as there has been no language proposals.

At the Special Session, members generally concurred with the Chairman’s Progress Report that while there had been progress on some paragraphs, it had not been sufficient for a revised text to be issued. Numerous members called for continued work towards a revised bracketed text on domestic regulation disciplines by building on what had been achieved during the drafting sessions, and which, in their view, had been accurately reflected in the Chairman’s Progress Report. Many members were convinced of the importance of a satisfactory outcome on domestic regulation as a means of ensuring the effectiveness of scheduled commitments. Several members also observed that the progress on domestic regulation disciplines had to be balanced with advances on the market access side of the services negotiations, and more broadly with progress in other areas of the DDA.

Why negotiations are stuck

A major reason why negotiating the liberalization of regulatory barriers to trade is more complex than negotiating on tariffs is that it is often difficult to separate the protectionist intent and effects of regulations from their purely domestic social objectives. Even where regulations openly discriminate against foreign services suppliers, it is often difficult to separate the domestic regulatory objectives from the protectionist intent. Regulatory measures that create barriers to trade without openly discriminating against foreigners are even more difficult to address through a mercantilist bargaining model.

The way forward

It is acknowledged that barriers to services trade lead to inefficiencies in service sectors and to high costs of services and increase the inefficiency of service industries, which can largely be achieved through liberalization. Why then was there so little progress to liberalize trade in services through the WTO in Doha, although potential gains from trade liberalization are considerably large? One explanation for the limited progress is that the standard mechanisms of reciprocity...
developed through GATT practice do not apply to services. But more importantly, since unilateral reforms have resulted in a boom in service exports, the service firms do not perceive market access to be their priority, and they must also be discounting the probability of policy reversals and thus the value of the WTO as a mechanism to lock in liberal policies.

However, the most important reason for lack of interest in multilateral services negotiations is the concern on the part of developing countries about possible market failures. Since the GATS is mainly concerned with the reduction of regulatory barriers on market access and discriminatory national treatment across all four modes of supply of services, there is no guarantee that liberalization of services through the GATS will lead to welfare gains unless:

- competition/contestability of markets is enhanced,
- effective regulation that will deal with market failures is insured, and
- equity objectives such as access to services for disadvantaged regions, communities or households are attained.

Hence, it has been argued that improved prudential and pro-competition regulation will be necessary to deliver the full benefits of liberalization. If the outcome of multilateral negotiations on services is to garner political support by developed as well as developing countries, a package to be negotiated among a critical mass of major players on services could be developed. The second dimension is international cooperation to address regulatory externalities. There are many such externalities: prudential regulation problems arising from differences in regulatory standards, dangers that liberalization gain will be appropriated by international oligopolies (e.g., transport and information services), and cooperation between host and source countries as concerns temporary labour mobility. Both dimensions of regulatory cooperation are needed to enable progress to be made on services trade liberalization, whether in the current Doha round, in future WTO talks or through unilateral reforms.

But from the desirability aspect, despite the concerns listed above, industry stakeholders in India are of the view that with the commensurate modifications in the Indian legal and regulatory systems, it would be an element of strength for India to push for disciplines to address issues as above. Recent data indicate that both Mode 1 and Mode 4 market access for professionals in developing countries like India has been steadily increasing, primarily due to increased internationalization of firms from developed countries in the manufacturing as well as the service sector. This is a demand-driven shift, which is benefiting from and feeding the demographic advantage of developing countries. Thus, today, effective market access is not an important issue in key markets of interest; however, stakeholders feel that negotiating on multilateral disciplines on Domestic Regulations would ensure market access for their service suppliers when the demand-pull weakens.

Summarizing views of the professional service providers in developing countries, on the elements of desirable disciplines, it appears that horizontal disciplines (for harmonization, streamlining and equivalence) should be sought for qualification procedures and requirements and licensing procedures, and for creating harmonized technical standards. Further, harmonization of licensing requirements and procedures are deemed to be beneficial, facilitating market access in developed country markets, especially in federal jurisdictions like the United States and Canada. However, it is unanimously felt that commensurate changes in the domestic legal and regulatory systems would need to be incorporated prior to adopting such Disciplines so as to fulfil the requirements under these Disciplines. The fact remains that given that domestic regulations in services are used as de facto market access barriers by importing countries, unless there is any agreement on disciplines on their indiscriminate use, no amount of market access negotiations would ensure gains for developing countries from services liberalization, thereby undermining the development agenda of the Round.

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WTO GATS documents

**TERI-ITEC Courses 2011-12**

Course VI - Trade and sustainable development: issues for developing countries  
28 November - 16 December 2011  
RETREAT, Gurgaon

### About TERI-ITEC

TERI is empanelled by the Indian Technical and Economic Cooperation (ITEC)/ Special Commonwealth African Assistance Programme (SCAAP), government of India, for this programme. Under the programme, seven courses are being offered for the year 2011-12. These are: climate change, decentralized energy solutions, sustainable development, energy-efficient technologies, solar energy, biotechnology, and renewable energy and trade and sustainable development.

Each individual course is a three-week long residential programme conducted in India, attended by participants from other developing countries. The courses are designed to meet the needs of senior and mid-level government and non-government officials from ITEC/SCAAP countries.

### Advantages of attending the course

- Increased understanding of various dimensions of each course;
- Development of practical knowledge through demonstrations and field visits; and
- Wider exposure to India as the course lectures are complemented by study tours.

### Course details

TERI’s Centre for Global Agreements, Legislation, and Trade (GALT) is offering a three-week training programme on: Trade and sustainable development: issues for developing countries’ under the aegis of the India technical and economic cooperation programme of the ministry of external affairs of the government of India. The programme will be conducted at TERI Gram, Gurgaon and Delhi.

The programme has been designed to offer understanding of trade issues from the perspective of sustainable development, rather than trade and environment linkages per se. Thus, trade’s linkages with economic growth, equity, and environmental sustainability, as well as human development, will be integral components of the programme.

The course will commence with an introduction to trade and sustainable development issues, followed by comprehensive learning on sustainable development in multilateral trade and environment regimes, non-tariff barriers and sustainable development, concerns of developing countries and small and medium enterprises (SME), and emerging issues in trade and sustainability.

Apart from TERI’s in-house experts, some of the leading Indian experts on these issues will join the programme as resource persons. The programme is likely to be attended by government officials and academics, as well as NGO officials from several developing countries of Asia, Africa, and Latin America.

Besides classroom lectures, participants will be taken for field visits to Rajasthan and Uttar Pradesh, which will include visits to export-oriented textile and leather units and stone carving units. They will also visit a few rural areas where unique sustainable development projects are in operation. The programme will provide a huge opportunity for lateral learning and in getting connected with people from other developing countries.

### Scholarship

The cost of the course, travel, and stay of the selected participant will be borne by ITEC (Indian Technical and Economic Cooperation, Ministry of External Affairs, Government of India).

### Application procedure

Fill up the ITEC/SCAAP application form and submit it to respective nodal government department/agency designated to nominate candidates. The nodal department/agency will, in turn, forward the applications to the Embassy/High Commission of India.

The selected participants would be informed by the Indian Embassies of the respective ITEC/SCAAP countries.

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BOOK REVIEW

Integrating services in South Asia, trade investment, and mobility

Rupa Chanda*
Anandajit Goswami

The book starts with the transformation of SAPTA (South Asian Preferential Trade Agreement) to SAFTA (South Asian Free Trade Agreement) from 1995 to 2006. It initiates the discussion giving a background of lower growth in intra-regional trade in the South Asian region owing to strained political relationship and absence of infrastructure.

SAFTA discussions have focussed mainly on the traditional goods of agriculture, leather, and textiles sector. In recent past, trade in services has been identified as an important instrument for this integration. Finalization of SAARC Framework Agreement on Trade in Services as an outcome of the 14th SAARC summit justifies this importance. This importance in SAFTA has emerged at a time when the South Asian countries have witnessed high GDP growth boosted by significant contribution from the service sector.

Negotiations in regional platforms like BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation), bilateral treaties like Indo-Bhutan treaty, Pakistan-Sri Lanka FTA, India-Sri Lanka FTA, India and Nepal treaty have mentioned services and working groups. Bilateral agreements have been delving with negotiations for integrating certain key services areas to SAFTA through limiting restrictive rules of origin and reducing the negative list of items.

Such reduction can improve the existing low trade intensity and can enable larger inter-regional trade regime beyond the unilateral nature of trade relationship in South Asia which has been dominated by food and animal products marked and fraught with lack of complementarity in similar goods, high non-tariff barriers, absence of greater political will, low purchasing power, informal trade, limited transportation infrastructure, existence of higher custom duties.

With this existing set-up, the book through its various chapters identifies service trade to play a potential role in formation of trade complementarities in service sector domains like telecommunication, banking, information and communication, energy, health and education sector of South Asia.

Chapter Review

The question with which the first chapter begins is – “What is the essence of services integration in South Asia?”. Possible answers of this question are ingrained in the potential role of service sector in tapping high potential of trade complementarities in South Asia forming convergence of diverse interests. This becomes more pertinent as the share of service sector in South Asian GDP has increased from 36% to 50% during 1980 – 2006 whereas the share for agriculture sector has fallen to 18% from 33% during the same time. The share of service sector in South Asian countries have grown due to the contribution of the service sector to the economies of India, Nepal, Maldives, and Bhutan.

The chapter describes how the nature of dependence of these countries on the service sectors varies. While Maldives and Bhutan are dependent on the service sector, the size of this sector in these countries are much smaller than India. These countries have not been able to diversify their economy out of certain service sectors. Also countries like Bhutan has faced wide scale fluctuation in service sector earnings during the time period 1980 – 2006.

Each of these countries are marked by differential, asymmetric growth in several sub sectors like construction, wholesale, retail trade, distribution, communication and transport. Non-commercial sectors like public administration have played a role in contributing to the sub-sectoral growth. While India’s
service sector has shifted more towards professional and business services other economies have relied on traditional services of tourism and transport.

But, employment elasticity of service sector has been mixed. In Nepal, it has been low whereas in Maldives it has been high. This raises the pertinent question of how far the service sector has created local employment and affected the sustainability of local economies in these countries. It will be an important facet to analyse the implications of service sector on the employment and quality of living of women at the local level which is not covered in this book. It is also important to see whether trade in service has led to skill development at the local level and helped in exchange of skills by movement of people across the nations. This can be done after identifying temporary, permanent level and nature of skills amongst the people.

A glimpse of the analysis of cross country person movement in the chapter on health services show that outward movement of people from South Asia has been directed towards Middle East, US and UK. People from India have moved outwards for high-skilled jobs though residents from Bangladesh and Pakistan have travelled to the Middle East, US and UK in low and semi-skilled jobs. Many of them were women. People from Sri Lanka and Bangladesh have also been absorbed in the hospitality segment of Maldives. Though there has been migration belonging to Mode 4 segment of the services sector, South Asia experienced large scale FDI liberalization in information and communication services in the Mode 1 and Mode 2 segments. South Asian countries like Pakistan have received huge FDIs in the telecom sector that has generated a growth in the telecom services.

The chapter dealing with communication services mentions that telecommunication segment has grown during 1980 - 2006 due to high growth of the mobile telephony in South Asia. This evinced in the mobile telephony growth of Maldives and Sri Lanka. In Maldives, the level of liberalization has been low though penetration rates have been high. While in Sri Lanka, penetration rates are high even with a less competitive sector. These mixed outcomes show asymmetric realities of service sector growth in South Asia. Country-wise regulations have played a key role in realizing those outcomes. The nature of regulation guiding the extent of liberalization in each of these countries has primarily been dependent on the stage of development stage of the countries of South Asia. Other factors which are important for the telecom service growth are related to - licensing, service quality, universal access, interconnection, network services, promotion of regional traffic, inter country direct services, hubbing and transit facilities to promote interconnection along with number harmonization and access to international networks through network simplification. Constraints in the sector that needs to be phased out pertain to spectrum shortage, insufficient interconnection between operators, mechanism of license auctioning, dispute resolution and policies, and regulation for broadband development. Maldives, Sri Lanka and India can think of operating on a regional scale to achieve the scale economies of telecom service sector operation in South Asia through minimization of these constraints which can fast-track sectoral growth in South Asia.

In the subsequent chapter the book talks about another important service sector viz. energy services in the context of South Asia. Energy services is a crucial area as most South Asian economies are dependent on fossil fuel imports for meeting their energy needs driven by growing energy intensity, per capita energy consumption. Reduction of reliance on fossil fuel through bio-energy trading in South Asia is one of the futuristic options available. However, the book does not explore these options for creating integration in South Asia. The author highlights the importance of the role of power trading between countries like Nepal and India as an important means of mainstreaming integration of South Asian countries. Inter-regional hydro power, gas trading amongst the South Asian countries is mentioned as one of the key ways for leveraging larger integration in South Asia facilitated through greater political will. This can be realized through larger investments in power generation in South Asian countries. In this regard, the option of IPP route of power generation has not worked well in South Asia and challenges have emerged in power generation and its subsequent exchange with neighbouring countries through transmission networks. In this segment, hydro power trading between Nepal and India has worked out well. But gas trading between Bangladesh and India has suffered from the negative effects of ineffective country to country relationships.

The importance of energy trading as a regional cooperation measure has been realized by decision-makers and it has been mentioned in the bilateral agreements of South Asian countries with other nations outside this block. Bangladesh-Russia FTA, Pakistan-China FTA bears evidence to this fact. But further scope of regional cooperation through sub-regional initiatives using platforms like SAARC Energy Centre exists. Public private partnerships will also play a major role in that.
Such partnerships have to be realized by implementing joint venture agreements to smoothen energy trading and exchange of derived services that can be linked to the value chain of energy generation. A policy push through the application of the SAARC platform from the macro level also has to be done. A larger thrust on renewable energy for energy generation, trading and foster exchange of energy services in South Asian region also have to be given. REEP (Renewable Energy and Energy Efficiency Partnership) secretariat can promote such regional trade in renewable energy based energy product and service trading.

The book also discusses tourism sector, a domain where South Asia has large prospects. The contribution of tourism to South Asian GDP and employment has increased over the years. Tourism sector growth has gone up in emerging economies of India following Bhutan. Political stability and economic growth has helped in attracting new tourists into South Asia and it has led to a larger growth of tourism receipts, tourist arrivals. Some of the South Asian countries like Bhutan and Nepal have addressed domains of ecological, environmental sustainability along with employment generation through promotion of tourism. At the same time FDI has gone up in this sector. Restrictions have been posed in FDI norms like Bhutan where a restriction of 70% ceiling on FDI has been imposed. Certain segments of tourism services have not been opened to foreign investors in spite of big countries like India which has played a major role in attracting tourists through measures like eco-tourism, larger sports and cultural exchange. Many Indian hotels have also been opened in South Asian countries like Sri Lanka, Bhutan through joint venture agreements. The success rate of these joint venture operations, however, has been mixed. Future tourism promotion in South Asia will require better transportation links, creation of transport hubs, and smoother operationalization of visa issuance. Bilateral negotiations in this sector by South Asian countries have started through existing negotiation platforms of Pakistan-Malaysia, Pakistan-China, India-Asean FTA and BIMSTEC.

An important service sector with social welfare implications like health has also been explored in one of the book chapters. Article IV of SAARC Social Charter mentions importance of primary healthcare to address social welfare objectives. Though there exists a large regional market for healthcare, investments and healthcare expenditure have been projected very low below 3%-4% of GDP. Though countries like Maldives and Bhutan have raised public expenditure it cannot ignore the increasing private sector participation and foreign direct investment in high-end health care services.

With an increase in private player participation, out of pocket expenses of people availing high-end health services in South Asia have gone up due to lack of harmonization of insurance products and lesser penetration of such products. Though primary healthcare has been a cause of concern, in the tertiary segment, hospitals have been opened across SAARC countries through joint venture partnerships. Apollo hospitals have been opened in Sri Lanka through joint venture agreements. At a regional level, SAARC member countries have gone ahead for cooperation with CIDA (Canadian International Development Agency), WHO (World Health Organization), and UNFPA (United Nations Population Fund) for research, analysis and capacity building. Health tourism and ICT-based telemedicine initiatives have also started in South Asia. But for a larger development of health services mutual recognition and registration norms, visa facilitation mechanisms and faster technological solutions have to be provided.

Education service also plays an important role in social welfare along with health services. Primary education in South Asia has been fraught by school dropouts, low student faculty ratio, lack of penetration of primary education, and lessening of government expenditure for improvement of quality of education services. In the tertiary segment, private institutions have signed joint venture partnerships and have opened branches in different countries of SAARC. Students from SAARC in the higher education segment have travelled to developed countries like the US, UK, Canada and Australia. But student exchange between the SAARC countries through fellowships needs to be developed and facilitated through mutual recognition, formal accreditation systems and faster visa issuance regimes. Most of the South Asian countries have followed a conservative negotiation stand in education services across the different modes in multilateral platform. However, Pakistan has offered restricted modes in segments like Mode 1, 2, and 3. India has stuck to higher education services in her negotiations under the GATS. In a regional and bilateral context, educational services have been prominent and have been mentioned in India-Singapore CECA (Comprehensive Economic Cooperation Agreement) and Pakistan-China FTA.

Thus the chapter review of the book paints a picture of how Mode 4 has been one of the major areas of negotiation segment for South Asia. Developed
countries have put pressure on developing countries to get market access by means of Mode 1, 2, and 3 through the opening of services like telecom, banking, insurance, legal, accountancy, education, and environment. Developing countries have voiced their intention to get larger market access in developed countries through Mode 4. At the bilateral, regional level education services have been mentioned in the India-Singapore CECA. South Asian countries led by India are also negotiating to get deeper in the scheduled commitments rather than adding new ones for negotiation in the multilateral platform of WTO. Also, there is a need to strengthen service trade within South Asian countries through differentiated treatment considering the asymmetries of the developing and least developed countries of South Asia.

**Conclusion**
The direction given by the book on applying service trade as a mechanism for harnessing regional cooperation and integration is very timely and deserves accolades. However, the book misses out certain futuristic insights that can become more important in the context of intra-regional service trade. One such area pertains to how institutional mechanisms and policies need to be integrated to develop bioenergy related service trade in South Asia. Energy service trade tapping the renewable energy potential of the region can not only bring welfare gains for the region but can also contribute to sustainable development as it can address the local sustainability issues and the larger global debate of trade and climate change. Though a very clear macro outlook of trade in services for the South Asia region comes out from the book, the essence of that will be only felt when the grass roots implications of such trade in services are estimated and presented. Future research and insights in this area will lend a better direction on how service sector trade can bring together the people of South Asia leading to a deeper integration in this region.
**NEWS UPDATE**

**Trade Winds**

**India, Africa to meet $70 billion trade target by 2015**

India and Africa have set a bilateral trade target of $70 billion by the year 2015. At present, the bilateral trade is around $45 billion. This was indicated by the Indian Commerce and Industry Minister, Mr. Anand Sharma, during his address at the CII-Exim Bank Conclave on India-Africa Project Partnership 2011.

Trade engagement with Africa is an area of high priority for India. Currently, India is engaged in negotiations for a preferential trade agreement with Southern Africa Customs Union and is in talks with the Common Market for Eastern and Southern Africa and the Economic Community of West African States.

*Hindu Business Line, March 29, 2011.*

**India, EU settle generics dispute**

India has sorted out most of its differences with the European Union on the production of low-cost generic medicines, in the context of the proposed free-trade pact. The Civil society groups have, however, warned that India should be on its guard to ensure that the intellectual property rights (IPR) regime is not changed to allow extension of patents.

The EU has been pushing India to adopt more stringent IPR standards to match the strong patent protection provided by it to its industry. India, however, made it clear that it would not go beyond the commitments already made under the international IPR agreement (TRIPS). The proposed broad-based trade and investment agreement will lower tariff barriers on a large number of goods, liberalize rules on investments and provide more opportunities for services.

*The Economic Times, March 15, 2011.*

**India, Asean services and investment pact**

India and the 10-member Association of Southeast Asian Nations (Asean) grouping expect to clinch their much-awaited trade agreement in services and investment by the end of 2011. Malaysia’s trade minister, Mustapha Mohammed, said this while speaking at the inauguration of the India-Asean Business Fair in New Delhi.

The two parties signed a free-trade agreement in goods in August 2009 which came into effect in January 2010. The Philippines is the only major economy believed to be blocking the India-Asean services pact, being a competitor of India in services globally. With negotiations on this part of the agreement dragging, India has started negotiating with individual Asean member countries for comprehensive trade agreements and recently concluded a Comprehensive Economic Partnership Agreement with Malaysia.


**China forces G20 to water down resolution**

China prevailed upon the G20 grouping to water down a resolution to correct global economic imbalances, even as India raised concerns about rising commodity and energy prices. The final G20 communiqué that was issued after two days of hard bargaining excluded key indicators like foreign exchange reserves and fiscal deficit on China’s insistence.

Sitting on huge forex reserves, China does not want these to be included as a parameter for tracking and correcting structural flaws to reduce global trade imbalances. China has $2.8 trillion worth forex reserves and is accused by the US of manipulating the yuan.

*The Times of India, February 21, 2011.*

**India, Japan sign landmark trade deal**

India and Japan signed a comprehensive economic partnership agreement which is expected to give greater market access to both countries. The agreement between the two countries covers trade in goods, services and investment and is expected to reduce tariffs in about 90% of the trade in the next 10 years as both Japan and India seek to diversify trade and ensure greater market access within Asia.

The pact between the two countries has ensured that the sensitive sectors for India are fully protected. These include agriculture, fruits, spices, wheat, basmati rice, edible oils, wines and spirits and also certain categories of industrial products such as auto and auto parts.

*The Times of India, February 17, 2011.*

**Controversy over “Duty Free” Aid Proposal**

The European Union proposal to give duty-free access to Pakistani textiles as a flood relief measure has raised controversy. The proposal has been opposed by India, Sri Lanka, Peru and Bangladesh. They have argued that EU can directly help Pakistan in cash and humanitarian aid.

Pakistan has lobbied hard to get approval for the package that would allow duty free entry to 75 items, 64 of them textile products, into the EU countries for three years. The EU cannot give duty concessions to Pakistan till the WTO waives its obligation of treating all member countries the same, known as the most favoured nation clause.

**Investment Current**

**FDI gets reoriented towards emerging economies**
A UN body report suggested that half of the global foreign direct investment (FDI) flows have been absorbed by developing and transition economies. The FDI has increased in countries like China, Hong Kong, Malaysia and Vietnam. But FDI in South Asia has declined by 14%. According to the report, FDI flows to the developing economies rose owing to a rise in South South flows and faster economic recovery. FDI inflows to the developed countries have also reduced during 2010. In spite of this trend in the FDI flows, India faced a decline in FDI during 2010.

*The Times of India, January 19, 2011.*

**FDI in Africa to be peaked by 2015**
Ernst and Young’s first ‘Africa Attractiveness Survey’ suggests that the FDI inflows to Africa might reach its peak value of US$ 150 billion by the year 2015. This suggestion is further justified by the fact that between 2003 and 2010 South Africa, Egypt, Morocco, Algeria, Tunisia, Nigeria, Angola, Kenya, Libya, and Ghana received 70% of new FDI projects of Africa.

Positive growth in FDI is expected to continue in the long run supported by the optimism the investors have shown towards the long term FDI investments in Africa.

Major sectors where FDI will be channelled in future are – extractive industries, tourism, consumer products, construction, telecommunications and financial services. But the FDI in these countries will face certain risks owing to political stability, governance and corruption issues in the destination countries.

*Ernst and Young Africa Attractiveness Survey, March 31, 2011.*

**Enhancement in outward FDI from developing countries**
Outward FDI from BRIC (Brazil, Russia, India, and China) continues to have a significant contribution in the total outward FDI of the developing countries. Out of the total outward FDI from developing countries, 60% of the contribution is from countries like Brazil, Russia, India and China. Detailed analysis of the outward FDI shows that most of these outward FDI was in the form of green field projects in other developing countries. Major part of this FDI was of South South nature as outward FDI from developed countries reduced towards the end of 2010 till now.

Majority of these South South FDIs were mergers and acquisitions which also includes the acquisition of Zain Africa by Airtel. There was also a dominance of the extractive sector in the South South outward FDI flows from the developing countries during 2010 till now.

*World Bank, February 4, 2011.*

**Small countries figure in bilateral investment treaties**
An analysis of bilateral investment treaties showed that a small country, in terms of GDP and economy, like Benin has engaged itself with several bilateral investment treaties with European countries which have high GDP. Some of these European countries include Germany, Belgium, Switzerland, and the Netherlands. It also has a bilateral investment treaty with a big economy like China and at the same time has engaged through bilateral investment treaties with countries like Burkina Faso, Chad, Mali, Ghana and Lebanon. Benin’s involvement in investment relationships with countries from various blocks of the world only goes on to highlight its diversified nature.

*UNCTAD, Investment Policy Monitor, January 15, 2011.*

**Transitional Arrangement for Bilateral Investment Treaties (BITs) between EU and Third Countries**
A new regulation has been passed by the European Parliament bringing about a transitional arrangement for Bilateral Investment Treaties between member states of the EU and other countries outside the EU. The transitional arrangement is directed to bring forward a new investment policy and regime dealing with the European investment in other countries outside EU as a part of BITs between these countries and EU member states.

The objective of the regulation is to protect all the investors from EU while making their investments in the countries outside EU as a part of the BITs. This regulation aims to create a common policy providing equal protectionist environment to all European investors in the third countries. The regulation will also hold for all EU states.

*Transnational Notes, Reflections on Transnational Litigation and Commercial Law, February 11, 2011.*
Fire and Earth

US-China clean energy cooperation
In January 2011, US and China signed an agreement to move forward the US-China Clean Energy Research Center (CERC). It will add to the ‘new era’ of clean energy cooperation between the countries. The two countries have been cooperating on clean energy technologies for decades. Collaboration on clean energy has already existed in the form of government-to-government, academic-to-academic, and business-to-business basis. But this programme will initiate a long run public-private partnership in this field. Financed by $150 million public-private funding, this programme will include establishment of research groups, or “consortia,” which will focus on in-depth research on building efficiency, electric vehicles, and advanced coal technologies, including carbon dioxide capture and storage (CCS). Each consortium will be led by a premier research institution in the related field and supported by private sector partners.

Energy cooperation between Egypt and Uganda
According to a deal in Neil water sharing between Egypt and Uganda (along with Kenya, Ethiopia, Tanzania and Rwanda), Egypt will set up a joint venture to produce 1,700 megawatts (MW) of hydroelectric power in Uganda. The pact has ended the long standing conflict over Neil water sharing issue. The joint venture will fund the generation of 1,000 MW. A private Egyptian company has also expressed interest in investing a further 700 MW generation. Under this agreement three hydroelectric plants will be set up with an investment cost of $100 million. Many other development projects will follow this decision.

Biofuel initiative in aviation industry
Boeing and Petro-China, have signed an agreement to evaluate the possibility of a sustainable aviation biofuels industry in China. The study will analyse the environmental and socio-economic benefits of developing sustainable alternatives to fossil-based jet fuels. The assessment will consider all dimensions of agronomy, energy inputs and outputs, analysis of lifecycle emissions, infrastructure and government policy support. This algae-based aviation biofuel development initiative will be supported by AECOM, Honeywell’s UOP, United Technologies and Air China and some other research organizations from the US and China. The joint laboratory for sustainable aviation biofuels will be located in Qingdao. According to the source, potential raw material for the above biofuel will not distort the global food-chain, or compete with fresh water resources or lead to unintended land use change.

India-Russia joint venture for steel plant
NMDC has signed a MoU with the Russian steel and mining agency, Severstal, to set up a steel plant with capacity of five million tonne per annum in Karnataka. The steel plant will have a 50% shareholding between the partners. As part of the MoU, the partners will establish a joint venture company to check the progress of work on the steel project. According to the agreement, the joint venture company will have its own captive coking coal mining subsidiary in Russia and iron-ore mining subsidiary in India to ensure long-term supply of raw material to the proposed plant. The project is expected to start by 2012. Severstal will share its latest steel-making technology with NMDC for the venture. The Karnataka government has already allotted 2,500 acres of land to NMDC for the project.

Joint venture for renewable power generation in India
NTPC Ltd., the largest Indian power generation agency, has signed an agreement with the Asian Development Bank and Kyuden International Corporation to develop a 500MW renewable power generation portfolio. As per the agreement, they will form a joint venture company to develop wind power and small hydroelectric projects in India and overseas. According to the agreement, NTPC will have 50% stake while the ADB and Kyushu each will hold 25% share. The project will help India to reduce its dependence on fossil fuels, control greenhouse gas emissions and improve energy security. The venture will also help NTPC to achieve its mission to generate 35,840MW power through non-fossil sources by 2032.

Biodiesel initiative in Singapore
Neste Oil, Finland’s top refiner has formally started operation in its Singapore-based biodiesel plant. With a cost of S$ 967.9 million and an annual capacity of 800,000 tonnes, this plant will be the world’s largest biodiesel plant. The plant will use palm oil, palm oil products and animal fat as feedstock. But it has to face the challenges posed by soaring palm oil prices and shrinking supply of it. The higher price of biodiesel versus fossil fuels and increasing food inflation are other important challenges. Because of the huge domestic subsidy on fossil fuel and low biodiesel mixed rate in Asian countries, the plant will target market in Europe and Canada which have much higher biodiesel mixed rate. The company is also planning to diversify the sources of feedstock. It may consider other vegetable oils and waste fats along with algae oil, microbial oil, and fuel production from wood biomass.
Air and water

Cop 16 – A ray of hope?
The annual event of the United Nations Framework Convention on Climate Change (UNFCCC) of CoP (Conference of Parties) took place in Cancun in November-December 2010. It was hosted by the Government of Mexico. The event witnessed the formation of the Cancun Agreement, which is, since COP 15 in Copenhagen, a step forward for the global community in terms of a consensus on climate change mitigation, adaptation and reduction of greenhouse gas emissions. These are a set of significant decisions by the international community to address the long-term challenge of climate change collectively and comprehensively over time and to take concrete action to speed up the global response. The agreement supported a new Green Climate Fund for Developing Countries, parameters for financing REDD+ and an outline Adaptation activities.

http://unfccc.int/meetings/cop_16/items/5571.php

EU voted to ban emission trading on credits from projects that destroy industrial gases
Twenty-one of the twenty-seven member states of the European Union (EU) voted to ban from use in the EU Emissions Trading System (EU ETS) emission offset credits from certain projects which destroy industrial gases. The ban will apply to projects which destroy two industrial gases: trifluoromethane (HFC-23) produced as a byproduct of chlorodifluoromethane (HCFC-22) production, and nitrous oxide (N₂O) from adipic acid production. HFC-23 and N₂O are both powerful greenhouse gases which contribute to climate change. Companies will be able to use such credits for 2012 compliance under the EU ETS until April 30, 2013, but not thereafter. Currently, around 23 industrial gas projects account for two-thirds of all the credits generated through the Kyoto Protocol’s Clean Development Mechanism (CDM). Most of these projects are undertaken in China and other advanced developing countries. The ban on the use of such credits in the EU ETS will apply to all such projects undertaken under the CDM as well as any other developed countries through Kyoto’s Joint Implementation mechanism.


China launches 12th Five-Year Plan
China rolled out its 12th Five-Year Plan (FYP) in March 2011. The uniqueness of the (FYP) is that both climate change and environmental issues have found prominent position in the report. The country’s has pledged its commitment towards international cooperation and the UN-led climate negotiation process, including concerns of climate finance and technology transfer. In order to address energy and climate change concerns, there are separate targets for energy intensity which is aimed at 16% reduction by 2015 and carbon dioxide emissions per unit GDP which has been put at 17% by 2015. The plan talks about new policies to promote greater industrial efficiency, and a major push to include all other sectors of the economy. It also incorporates the goal of 11.4% non-fossil fuels in primary energy consumption by 2015.

http://www.sustainablebusiness.com/index.cfm/go/news.display/id/22006

Funding opportunity post Kyoto period
Investments in renewable energy, waste management services, efficient lighting, etc., across the developing world is expected to be benefitted from new funding for carbon credits generated post-2012. The World Bank’s Umbrella Carbon Facility (UCF) Tranche 2 has become operational with an initial funding of €68 million primarily contributed by the Deutsche Bank, Global Development Facility and Swedish Energy Agency. Tranche has been designed and developed to complement other carbon funds as it intends to purchase carbon credits far beyond the end of the Kyoto Protocol’s first commitment period, thus, giving opportunity to project developers longer contract periods than available in the market at the time. Accordingly this will give opportunity for existing carbon projects to continue selling their carbon credits well beyond 2012. Seventeen projects and programmes are being considered, with a potential to reduce a total of 26 megatons of carbon dioxide and other greenhouse gases during the 2013-2018 period.


COP-10 successfully signs off Nagoya Protocol
The COP-10 Biodiversity Conference successfully signed the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits (ABS). Under the new protocol, parties will be legally obliged to follow rules designed to prevent bio piracy and provide benefits, including financial ones, to other parties when their genetic resources are accessed. In addition to the protocol, COP-10 agreed on other biodiversity-related issues, including a strategic plan to reduce biodiversity loss by 2020, measures to fight invasive alien species, especially those introduced as pets, aquarium and terrarium species, and as live bait and live food, and to prevent deforestation.

http://search.japantimes.co.jp/cgi-bin/nn20101031a1.html

MoEF issues new guidelines for eco zones near sanctuaries
The Ministry of Environment and Forests (MoEF) issued new guidelines for imposing restrictions on economic, construction, industrial and some tourism activities, to create eco-sensitive zones that will work as shock absorbers for the protected areas and prevent ecological damages caused due to developmental activities around National Parks and Wildlife Sanctuaries. These zones would also ensure that these areas are treated as transition zones from areas of high protection to areas involving lesser protection. The key objective is to regulate certain activities around National Parks and Wildlife Sanctuaries so as to minimize the negative impacts of such activities on the fragile ecosystem encompassing the protected areas.

http://www.wildlifewatch.in/section/habitat/3914.html
Fossil Fuel Producers, Climate Change and the Decarbonizing Debate

Supported by: Lowy Institute and the Centre for International Security Studies, Australia.

As efforts for a post-Kyoto climate regime intensify, fossil fuel producers are faced by a unique conundrum where their participation in the international consensus could potentially damage their most significant economic strength. Since the move towards a low carbon future involves a cut-back on use of carbon-intensive fuels, fossil fuel producers are concerned about the impacts climate action would have on their income and well-being. In this context, the study is analyzing the position of fossil fuel producers in the climate change debate. It will discuss what decarbonization would imply for these countries and the companies in the fossil fuels sector. Clearly, countries vary in their strength to grapple with the resultant changes, and will need to make their economies and societies resilient. The study will also examine the current initiatives in this direction, and how diverse international stakeholders could collaborate to further dynamic growth in these countries.

The draft report of the project is in its final stage of preparation.

Examining issues in carbon barriers to trade

Supported by: Norwegian Ministry of Foreign Affairs

The nexus between trade and climate change is receiving much attention lately. This also has roots in the fear of leakage of carbon-intensive industries to developing countries. However, such adjustment measures can impose significant economic costs upon developing countries, which in turn might affect their mitigation and adaptation capabilities. The study is undertaken with the objective of addressing trade issues in climate change mitigation and adaptation from an Asian perspective. The project will examine the issues in carbon barriers to trade and their implications for trade competitiveness of developing countries as well as their implications for climate change mitigation and adaptation strategies.

The study will throw light particularly on the existing and potential carbon related trade barriers and the vulnerability of select sectors to such trade policies. The analytical findings along with stakeholders’ feedback will help in designing possible sustainable interventions in the changing trade policy scenario. Under the project, the literature survey is almost complete. Currently, a major activity is the collection of relevant data.

IPR roadmap for technology transfer in developing countries for mitigating and adapting to climate change

Supported by: Norwegian Ministry of Foreign Affairs

The project seeks to devise an IPR regime roadmap for developing countries that uses existing TRIPs flexibilities and beyond TRIPs, reconciling the twin goals of incentivizing innovation and facilitating technology transfer for mitigating and adapting to climate change.

Examining the role of trade agreements other than TRIPs and developments at forums like the WIPO in coercing developing countries to adopt TRIPs-plus obligations as well as assessing how (if at all) IPR issues and options for technology transfer vary in the case of adaptation as against mitigation will be an important part of the study.

Exploring flexibilities beyond TRIPs and harmonization of international agendas (e.g., WIPO development agenda) in favour of technology transfer for developing countries, and emerging alternative IP options like patent pooling, open sourcing and green patent commons, which are still in rudimentary stages, but expected to grow in recent times, will also be examined.

The project started in August 2010 and the scoping study has already been completed. Currently, work is on for preparing case study for select climate technologies in three Asian countries.

‘Responsible sovereignty’ and energy resources

Supported by: Konrad Adenauer Foundation

What does ‘responsible sovereignty’ entail in the context of energy minerals resource development? What does it imply in the context of the principal-agent relationship? These are important questions as nations exercise sovereign control over resources, of which they are custodians on behalf of the people. This study examines these issues as they translate into control and governance of key energy resources. It will focus on coal and uranium in India and be woven around three broad governance themes—global investment strategies, sharing of benefits and burdens from such development, and issues pertaining to the policy and institutional framework. The project is in its preliminary stage now and work for the three modules is yet to start. Meanwhile, work has started for the following five background papers, three of which have already been completed:

- Sovereignty and resources
- Production and use of coal
- Production and use of uranium
- Trade and investment issues for coal and uranium
- Coal and uranium pricing and the institutional structure in the power sector

The project has completed the literature survey and prepared the background papers. Currently, the project team is engaged in field work related activities.
A special event titled “Trade and technology dimensions of energy use and climate change” was organized by TERI along with the Asian Energy Institute (AEI) on the 2nd of February 2011. The event was organized as a part of a larger project being implemented with support from the Norwegian Ministry of Foreign Affairs and in research partnership with select AEI members. The event started off with an inaugural address by Dr R K Pachauri, Director General, TERI, wherein he emphasized the need for developing global consensus on these issues particularly in case of relevant technologies which need to be made accessible to larger number of people to deal with the challenges of climate change.

It was recognized that the issues of trade and competitiveness arising out of climate change mitigation have to be dealt with carefully. Available evidence suggests that competitiveness impacts of climate change mitigation measures in developed countries are not very significant. Hence, unilateral measures by developed countries might not help the climate much and they might upset the international trade environment. On the issue of liberalization of environmental and climate friendly goods, apprehensions were expressed that the exercise may lead only to market access enhancement without serving the environment or climate enough. There is also a concern that this can lead to a situation where we get stuck to certain technologies which might even discourage faster adoption of better technologies that are yet to come.

It was recognized that intellectual property rights (IPR) play a central role in technology generation and diffusion. They can also act as barriers if we are not able to maintain the balance between the rights of owners and the users. The global IPR regime under the Trade Related Aspects of Intellectual Property Rights Agreement of the WTO, does offer some flexibilities for maintaining such balance. Nevertheless, it has to be ensured that these flexibilities can be used without hindrances or political pressures from developed countries. Instruments like compulsory licensing or public acquisition of technologies can be used but only after adequately compensating the owners of such technologies. For better access to technologies, we also need to look beyond compulsory licensing and even beyond IPR.

The Centre for Global Agreements, Legislation and Trade of TERI organized a three-week training programme on “Trade and Sustainable Development: issues for developing countries” during November 22 - December 11, 2010, under the India Technical and Economic Cooperation programme of the Ministry of External Affairs of the Government of India. The programme was organized at the TERI Gram in Gurgaon and was the third in an annual series. The programme was designed to understand trade issues from the perspective of sustainable development rather than trade and environment linkages per se. Thus the trade linkages with economic growth, equity and environmental sustainability as well as human development were integral components of the programme.

Apart from TERI’s in-house experts, some of the best Indian experts on these issues joined the programme as resource persons. The programme was attended by 19 participants from several developing countries in Asia, Africa and Latin America. It included government officials, entrepreneurs as well academicians. Besides classroom lectures, participants were taken for field visits in Rajasthan and Uttar Pradesh which included export oriented textile and leather units, and stone carving units. They also visited Tilonia in Rajasthan which is considered a unique model for sustainable development. The programme was highly appreciated by the participants for its structure, content, and quality of deliberations, field visits as well as the opportunity it provided for connecting with people from several other developing countries.