

An Update on ISO 14,000 Series Related Activities

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An Update on ISO 14,000 series related activities

Faisal Haq Shaheen

Background

Of the 100 strongest economies in the world, 51 are corporate entities. As the economies of Canada, Europe and the U.S. continue to adjust due to the increasing number of mergers and acquisitions, the number is sure to grow significantly over the next two years. This is the reality of the global politico economic regime. The labor force of developed nations is struggling to adjust to the demands of the niche employers and corporate dynamos of the millennium. Developing nations are struggling to find a balance between attracting foreign investors and losing local industrial strength and market share to the ambitions of larger international corporate entities. Having outgrown the laws and legislation of their native lands, multi and trans national corporations (MNCs and TNCs) continue to be spurred and molded by the competitive forces of an unregulated, global free market economy and the relentless drive to do things better, faster and cheaper¹. Given the size of such private sector entities, and the financial strength at their disposal, how does a small economy, and its smaller firms, position itself to survive either along the line of quality and/or cost? How can Pakistani industries elevate their goods and services capabilities to meet international standards and solidify customer relationships with buyers abroad?

The proactive certification of internal management systems to the standards of ISO² 9,000 and 14,000 can assist in increasing access to foreign buyers. It can also facilitate and quantify the promotion and improvement of quality and environmental standards within Pakistan's private sector. Various industry leaders in the global market place are actively using the ISO standards as 'flags' to indicate some level of commitment to quality and environmental concerns from their suppliers. This behavior is in response to the increasing demands of down stream clients and the end users themselves for commitment to quality and environmental performance.

At the firm level, the ISO management systems are simply standardized concepts and outlines for documenting self-improvement. Pakistan's more organized and better managed firms may already be running management systems with elements that are required by ISO but perhaps not calibrating, measuring or documenting them.

At the national level, building local capacity to monitor Pakistan's own auditing and registration should be striven for as it is still quite expensive for firms to import expertise, consultants and registrars to grant certifications under a foreign banner. Furthermore, a competent, local registration body would enable our standards community to capture improvements and popularize management commitment towards quality and environmental performance. The government should appeal for technical assistance from ISO and the global standards community to facilitate the establishment of a sovereign standards framework that will be recognized globally.

1 While the terminology has been used interchangeably, multi national corporations are those entities that have sales offices globally, but have production facilities in one country. Trans national corporations are corporate entities that have manufacturing facilities in various nations. International corporations enjoy revenue from global markets but their activities outside of their sovereign borders are generally through middlemen or distributorship like arrangements

2 The ISO 9,000 and ISO 14,000 series of management system standards outline management issues of quality and environment respectively with respect to a firm's activities. Certification of a firm's quality or environmental management system to these standards indicates that key 'standard' elements are being documented, examined and monitored to some degree. The standards are being increasingly used worldwide by buyers to assess supplier capability to meet certain environmental and quality criteria.

Once such a framework is established, it is possible that input from trade associations, will allow for the evolution of management systems that are sector specific (similar to the growth of QS 9000 from the initiative of automotive manufacturers GM, Ford and Chrysler). Eventually, agreement among the technical experts from Pakistan's more established sectors could agree upon certain conditions and systems that would allow for the improvement of quality within the sector through common language and proven practices. For example, if leaders in the textiles industry could organize and establish standards that tailor a system compliant with ISO 14,000, it would create a collective competitive advantage that could serve as a powerful marketing tool to foreign buyers. Such strategies will require a great degree of cooperation and cross linkage within sectors, compelling competitors to adopt cooperative and joint strategies.

This paper will provide a 'millenium update' on the recent events surrounding the development of the ISO 14,000 standards and particularly how their developments will affect Pakistan and developing nations as a whole. We will also place emphasis on the way in which environmental standards are being applied to the public sector, in the form of the Sustainable Forestry Management (SFM) standards.

Introduction

For many years, industry and environmentalists have been at odds over the issue of environmental protection, specifically from the focus of the firm, as the movements of environmental conservation and protection have shifted to control at the point sources of pollution. Conceptually, long term sustainable conservation efforts can be positively affected by changing the daily operations at hundreds of thousands of production, storage and distribution facilities around the world.

The ISO 14,000 series has been a follow up to the quality oriented ISO 9,000 series of standards and is designed to enable business and organizational entities to measure, monitor and manage their environmental impacts that result from day to day activities. The mostly industry led initiative is changing the way businesses operate and perform both qualitatively and environmentally on a day to day basis. The theory is that environmental performance can be achieved by increasing environmental management effectiveness.

As developing nations struggle to build their economies around 'export led growth', the ISO series of standards have become flags with which developed nation buyers can differentiate between firms with the capacity to meet standards and those that may not possess the capability. The presumption is, that firms that are concerned with quality and/or environmental impact will be proactive in marketing and complying with a recognized Total Quality Management (TQM) or Environmental Management Standards (EMS) whereas firms that are not proactive will not.

At present, developing nations rely on developed country auditing firms to perform their auditing functions for them. Technical assistance and expertise mobilization may make it possible for Pakistan to develop its own ISO 14,000 accreditation bodies to manage and audit the activities of local auditing firms.

Pakistan's strategy and attitude towards ISO 14,000 will be similar on the holistic scale as it is specific to the firm. It will be costly simply to use an ISO 14,000 compliant EMS to meet the bare minimum of regulations and avoid penalty. The real cost savings, especially cumulative on the international level will be through going beyond compliance and discovering new methods of maintaining environmentally friendly systems, realizing cost savings and new market opportunities.

Pakistani representation at the development table would give public and private sector stakeholders a better idea of what to expect, rather than be blindsided by market conditions and behaviors down the road.

The Standard Setting Process

ISO has seven main institutional components: National standard bodies, the general assembly, the council, policy development committees, technical management board, technical committees and technical advisory groups. The ISO organization is made up of 131 national standards bodies, each representing a different country. ISO members are stratified into member bodies, correspondent, subscriber and liaison members; depending on the level of activity that the country can afford and wants to engage in with respect to the standard creation process.

While standards are being developed by standards organizations from around the world, government environmental agencies and environmental public interest groups have not been actively involved in the development process. This has significant implications for the acceptance of the standards in the future, particularly by public interest groups and developing nations.

Currently, ISO standards are developed via consensus process involving voluntary participants. The ISO 14,001 standard allows companies or their third party organizations to certify that their environmental management system meets the ISO specifications. ISO standards are voluntary but are often made mandatory by member countries.

The technical work of the committee is highly decentralized, carried out in hierarchy of some 2,850 technical committees, subcommittees and working groups. Most of the drafters of the standards are industry representatives and the initiatives are also industry led. The stages of drafting are through the following:

Proposal and Preparatory Stages, TC 207

- Proposals – made by full members or executive management
- Preparatory stage – A TC is organized and participates in the drafting of an international standard. They are largely independent of the ISO Secretariat. For example, TC 207, chaired and funded by the Standards Council of Canada, is responsible for the development of the ISO 14000 series of environmental management system standards and 6 subcommittees have been formed under it. All ISO members have the option of participating in the work of any TC.

Committee, Inquiry and Approval

- Committee Stage – draft from committee is distributed by the ISO Secretariat for comments by members. Once consensus reached, the text is finalized for submission as a draft technical standard. Consensus however, need not imply unanimity.
- Inquiry Stage – Draft circulated to all ISO member bodies for voting and comment.
- Approval Stage – The final draft is circulated for voting to all ISO member bodies. Any comments are registered for future revision.
- Publication Stage – Once a final draft international standard has been approved, only minor editorial changes are introduced in to the final text and it is sent to the ISO central secretariat that publishes the international standard.

ISO 14,000 Series

Published Standards

The International Standards Organization has published the following standards.

ISO 14,001	deals exclusively with effective environmental management systems
ISO 14,004	assists those organizations interested in obtaining additional guidance on the design and implementation of an EMS

ISO 14,010	is intended to guide organizations, auditors and their clients on the general principles of the execution of environmental audits.
ISO 14,011	is designed specifically for the auditing of environmental management systems. An international EMS standard must be assessed and verified in a common and consistent manner if certification is to be credible.
ISO 14,012	standard establishes common qualification criteria for environmental auditors
ISO 14,020	sets the general guidelines for different types of labels
ISO 14,040	life cycle assessment, principles and guidelines
ISO 14,050	environmental management vocabulary
ISO 14,061	information to assist forestry organizations in the use of ISO 14,001 and ISO 14,004 EMS standards

ISO 14001 and Sustainable Forest Management: the bridging concept

ISO 14001 provides a sound management system for achieving environmental objectives. However, ISO 14001 does not specify absolute environmental performance requirements. This dilemma has been addressed to some degree with respect to forestry management, an area of interest to Pakistan.

While the principles, criteria and indicators for sustainable forestry management contain general performance requirements they do not provide details of what these imply for a specific forest in a specific context, nor how these should be achieved. Therefore, a combination of both approaches is needed for those forestry organizations that want to assure their stakeholders that their forest management will improve continually towards the ultimate goal of achieving Sustainable Forest Management. This idea has evolved into the so-called “bridging concept” that forms the basis of the ISO Technical Report 14061. The “bridge” between the management system links the

- Approach of ISO 14001 – specifying tools needed to establish and achieve an organization’s environmental policy without specifying absolute performance levels

With the

- Broad performance benchmarks for SFM – developed through various international processes whereby the standard provides policy objectives that should be achieved, without specifying what goals and targets should be set at the level of a specific forest area. Furthermore, it leaves open the issue of how to manage an organization’s environmental aspects to ensure that these policy objectives and targets are achieved.

Henceforth, the “bridging concept” shows a way forward to “lasting sustainable forest management”.

ISO/TR 14061

ISO/TR 14061 is designed to be used in conjunction with ISO 14001. It provides a link between the management system approach of ISO 14001 and the range of forest policy and forest management performance objectives, including principles, criteria and indicators of SFM that a forestry organisation can consider. It also provides definitions, background information, reference material and describes the relationship between SFM principles, criteria and indicators and a forestry organization’s EMS. The report concludes with chapters on the application of EMS based on ISO 14001 to small-scale forest ownership and operations, the options for demonstrating the effective implementation of EMS (varying from self-declaration to third party certification) and the ways to

communicate this. Annexes contain more detailed information on inter governmental organisation, government organisation initiatives and case studies on implementation.

Standards In Progress

ISO 14,015	Environmental aspects of Sites and Entities
ISO 14,021	sets standards are informative environmental self-declaration claims ³ type II eco labels.
ISO 14,024	sets standards for type I eco labels that are selective labels that determine environmentally preferred products within a specific product group based on life cycle considerations.
ISO 14,025	sets standards on technical reports for type III eco labels that are non selective and provide quantified environmental life cycle product information, provided by a supplier, based upon independent verification using pre set criteria.

The development of these broad standards is an area that Pakistan must monitor. As many countries continue to embrace various elements of ISO 14,000 into their legislative settings and policies, TC 207, as of August 1999 has made significant progress in this area. Emphasis is being placed on **four key elements of ISO 14021**:

- *Requirements for all claims.* These give the basic rules for the making of environmental claims.
- *Use of symbols.* This deals with the fact that many claims for products are made not just with the use of text but also by the use of pictures, symbols, etc.
- *Evaluation and claim verification requirements.* Essentially this requires that claims must be verified before they are made, and that this information must be available on request to any person.
- *Specific requirements for selected claims.* This recognizes that some claims are used more frequently than others (for example recyclable, biodegradable, etc.), and provides for specific requirements in the use of such claims.

ISO 14,031	Standard on environmental performance evaluation according to the ISO/TC 207/SC 4.
ISO 14,032	Environmental Performance Evaluation – Case studies illustrating the use of ISO 14,031
ISO 14,041	Life Cycle Assessment This standard on life cycle assessment is required by the type III labels but not Necessarily the type I or type II. The degree to which the cradle to grave analysis of a product's environmental impacts are not yet clear.
ISO 14,042	Life Cycle Assessment Impact Assessment
ISO 14,043	Life Cycle Assessment Interpretation
ISO 14,049	Examples for application of ISO 14,041

Global Recognition

World wide, the ISO 14,000 standards have drawn mixed reactions from various government, industry and civil society stakeholders. Of most interest, supra national bodies such as the WTO have also reacted to the standards series.

Government Reaction

Regulators have expressed an interest in the potential value of these kinds of voluntary regulatory approaches, particularly as privatization of the environmental monitoring task places less burden

³ Eco labels are segregated into type I, II or III based on the amount of information required or the standards that are incorporated into the label.

on the public sector to fund field officers to monitor industry. OECD member countries and Canada have started to substitute voluntary mechanisms for traditional command and control monitoring.

Benefits of voluntary monitoring programs include:

- Proactive and increased compliance with environmental regulations,
- Reduction in an organizations costs of compliance,
- Internalization of monitoring costs,
- Requirement to comply with other codes or charters, including internal company standards and industry standards.

The problem is that verification is still left up to the organization. Third party audits can and are used as a verification mechanism and can broaden the scope of an organization's environmental requirements.

Industry Reaction

As ISO 14001 EMS standard is relatively new, there have been few conclusive studies on the effectiveness of the ISO 14001 EMS standard in improving environmental performance. However, the evidence to date suggests that ISO 14001 can be an effective *tool* for improving environmental performance.

Industries in certain regions are taking strongly to ISO 14001 standards. Over 50 percent of Japanese industry groups mention ISO 14001 in their individual action plans.

The supplier requirement has not yet been written into the ISO 14,001 standard. The only element of the standard where direction is given on supplier issues is in 4.3.1 where it requires the organization to address all significant environmental aspects over which it has control in its environmental objectives. Arguably, a firm has control over 'who' the suppliers are and should consider the relative impacts of its supply chain when making purchasing decisions. Rumor among Northern based registrars is that the revised versions of the standards will require that suppliers be certified to an ISO 14,000 standard. There is a growing strategic trend in supply chain management where some companies are requiring their suppliers to become ISO 14001 certified. Currently, 5000 firms worldwide are registered to ISO 14001. Of the businesses that are not yet 'ISO 14,000 certified', many have brought their EMS' into compliance with ISO 14001 and are waiting to see if it becomes a consumer requirement before investing in the certification process. Many are taking the wait and see approach due to the following reasons:

- Unsure whether the ISO 14001 EMS is better than those that they already have in place,
- Ambiguity in the management system with respect to interpretation,
- Bureaucratic red tape and more paperwork will not be accepted or maintained by staff,
- Top down approach (which contradicts modern management principles),
- High implementation costs will tie up short term cash flows,
- ISO 14,000 standards are less rigorous than their existing EMS's.

The last point leads to the following question,

Can ISO 14001 as a baseline international standard, offer environmental management systems representing best practice? If not, can some form of it still be a useful tool?

If insurance companies, banks and governments decide so, companies will have to comply. Increased stock prices, liability and credit risk can be managed by an EMS and is of course of most interest to insurance companies (manage risks) and banks (ISO 14001 may become part of credit evaluation).

International reaction

The main benefits of the standard are likely to be the degree to which it assists organizations to efficiently comply with regulations, internalize monitoring costs and address the breadth of additional issues that may only be given lip service in the organizations corporate environmental policy. This will hopefully reduce the adversarial relationship between environmental regulators and industry groups. Major international issues pertaining to standards include:

- Proposed formal integration of ISO 14001 EMS standard in the European Commissions Environmental Management and Audit Scheme (EMAS).
- The decision to promote ISO 14001 was taken by the environmental ministers at APEC's cooperation forum in July, 1996.
- A proposal to design a meso American system for accreditation and environmental certification and to build capacity in the South American region.

The following lists the reactions to date of countries around the world that are looking to the ISO 14,000 series to bridge gaps and fill voids within their current regulatory frameworks:

Australia – government requires an EMS, not necessarily certification to ISO 14001. Government removed references to ISO 14001 from procurement contracts, claiming it hurt SMEs

Canada – Tax credits being provided by provincial governments to ISO 14001 registrees. Punishments are also being doled out in the form of requiring certification (the most popular case being of the toxic waste violation at a Bata facility).

China – Established a federal committee to introduce the ISO 14000 series in China as National Standards. All government contractors must be ISO 14001 certified.

Indonesia – Standardization council of Indonesia has formed 6 working groups to design a certification program.

Japan – The nation's basic environmental plan encourages the introduction of an EMS into companies as an effective tool to deal with environmental issues. The Ministry of Trade and Industry has been preparing environmental management plans that conform to ISO 14001 requirements and are aiding industry in developing sector by sector protocols for certification. Ordinances have been issued exempting certified companies from frequent inspections and reporting requirements.

Korea – Requires leading companies to achieve certification. The Ministry of Environment is implementing a program for environmentally friendly companies that requires an EMS, assessment and improvement plan and a demonstration.

Malaysia – encouraging industry to adopt ISO 14,000

The Netherlands – The Ministry of Public works is working to implement an EMS in accordance with ISO 14001.

Sweden – Promoting integration of EMS into government operations

Thailand – Economic and Social Development plan will include a commitment to ISO 14000 implementation. Agricultural ministry is applying ISO 14000 to all Thai farm products.

United States – The US EPA may waive routine inspections when companies can prove program is in place to meet environmental standards. The US EPA is also discussing with other federal agencies the potential use of ISO 14001 in conjunction with procurement policies.

UNCTAD, in cooperation with the Government of the Netherlands, is promoting a series of studies on the implications of ISO 14001 for developing countries.

The project in India has studied:

- why Indian companies are adopting ISO 14001,
- constraints and opportunities for adopting it,
- composition of TNC's and local firms adopting it,
- The facilitating mechanisms that government has put in place for adopting and certifying it.

The Government of Switzerland is providing support for a small workshop to be held in Geneva in 2000.

World Trade Organization Linkages

WTO trade law may give ISO 14,001 authority over other national approaches to EMS frameworks. In effect, ISO 14,001 may become a benchmark to which other environmental management certification systems are compared to when deciding if they are in accordance with WTO trade law. The way in which this might be introduced may be considered under the WTO agreement on technical barriers to trade.

Non-harmonized standards across countries and regions can contribute to TBTs. Where they are relevant, WTO members may use them, as a basis for their technical regulations except when such standards or parts would be ineffective or inappropriate. By promoting international standards, WTO trade law encourages harmonization of national standards to ensure that trade facilitation is the intent behind standardization and regulation. International standardization activities have expanded as exporters have recognized the need to realize the international process of trade. Some governments are not writing new standards and instead choosing to adopt international ones. ISO is being recognized as a supporter and partner to expand WTO programs with the common goal of promoting free and fair trade.

ISO is also acting as depositories for organizations that have signed on to the code of good practices for the preparation, adoption and application of standards. Adherence to the code of good practices is required and should be encouraged for the Pakistani representative standardizing body if it is not already in the process of signing on. Failure to do so may lead to disputes between standardizing bodies regarding legitimacy as to which codes will prevail in global interactions.

Causes for Concern

There are a number of concerns that surface regarding the ISO 14,001 process. Many of them are linked to the way that the standardisation process is structured at present as well as how technical resource and representation is achieved particularly from the developing and least developed nations of the world. At the heart of this issue is the conceptual flaw of the ISO system in developing and encouraging efforts towards sustainable development from a northern perspective without taking the country and regional differences and variability into account.

The ISO Process

The process itself does not ensure the involvement of a broad constituency. The extent to which ISO TC 207 adequately represents developing countries is questionable. Also, environmental groups feel excluded from providing input as the process is ruled by industry. High costs of participation result in less than proportional distribution of voting rights across nations of varying levels of development. Developing nations feel that ISO standards do not adequately take their interests into account. ISO should therefore review its internal processes in order to increase

developing country participation. This is especially important as the implementation of the ISO 14,001 standard and its ripple effects are expected to be most burdensome on the developing world. While ISO policies allow for comment and stakeholder participation, there is little constructive involvement from developing nations or environmental communities.

The link between Certification and Environmental Performance

The global environmental movement must realise the weak link between certification and environmental performance. Certification does not guarantee outstanding or even at par environmental performance. However, if certification is to give any indication of environmental responsibility, it must consider or illustrate a degree of environmental performance. While setting specific levels of emissions and discharges would be unattractive to firms, the EMS must consider environmental performance in order to be credible. At the same time, it is feared that if environmental performance is determined by Northern stakeholders only, Southern interests will be excluded from the process.

Public participation and transparency

Credibility requires a link between objectives and performance. As the standard does not establish a relationship, it lacks credibility. Transparency thus must be required in the setting of targets and in the conducting of maintenance audits. ISO 14,001 requires procedures to be set up to receive comments and concerns of interested parties but does not require a response. Also the definition of significant environmental aspects is also left up to the firm. There is no guarantee at present that the current standard ensures public participation in an effective and responsible manner.

Technical Barriers to Trade (TBTs)

The TBT agreement links requirement of international trade law with the content of international standards. It gives guidance to those adopting national standards and in the case of a dispute, the burden of proof is on the country that deems the standard inappropriate. The problem from a developing nation's perspective is that this favours the content of the international standard itself and questions any decision to stray from it.

Need for Guidance in the Standard

Negotiating environmental standards in a generic international standard is impossible. Variable impacts, sectoral differences, national variations and scientific uncertainties all make the task of completely harmonising standards impossible. While ISO 14,001 doesn't offer a lot of guidance, it could conceivably provide more guidance for a firm to address all of its environmental impacts in addition to the significant ones and make continual improvement an integral part of the standard. Sector specific technical reports are also a good first step taken by ISO 14,000 (ISO 14,004 for forestry/ISO TR 14,061). Documents can then address environmental management at the sector specific level and depart from the generic approach.

Considering International Agreements

The inclusion of multi lateral environmental agreements in the promoting environmental responsible management is also of concern to developing countries. In order to promote the development of environmental policies and the setting of effective objectives and targets, ISO refers to existing laws, regulations and requirements. There is gradient of common interests from the country to the national, region and international environmental levels. So there will be and must be some overlap and flexibility to satisfy all parties. The principle of subsidiarity should apply to environmental responsibility. The requirements of certain MEAs are similar to the ISO 14001 standard in that they are general and flexible. The Convention on Biological Diversity makes general recommendations

on how to integrate bio diversity conservation into policy and planning, without specifying strict performance requirements. ISO 14,001 does not refer to the work done under MEAs nor does it mention existence.

Recommendations for stakeholders in Pakistan

Developing country participation is key to ensuring that the ISO 14,000 series of standards attain some level of legitimacy. In order to achieve this, there is some recognition that developing countries will need assistance in establishing the necessary infrastructure and institutional capability to manage and maintain standardization and auditing competence and capacities within their markets.

- ISO 14,001 needs to be developed by a representative group if it is to go anywhere and gain legitimacy. UNCTAD along with many other developing nations have called on ISO to reform its processes to allow for broader forms of public comment and participation. Pakistan should push for more transparency and concrete measures to encourage public comment and equal representation from the developing world on the standards development process. Perhaps a web based development process could be promoted as a means to allow developing nations without the funds to participate at the meetings to comment on and monitor activities. A system of proxy votes might be allotted to ensure that countries that are not able to attend meetings might at least have their vote represented by a like-minded group. Holding meetings in developing nations (which will provide cost savings to Northern representatives) should be encouraged.
- Pakistan should consider applying elements of ISO 14,000 to the national level and the way that policy and government is run. With regard to national implementation of the ISO 14001 standard, (some of these elements have already been put in motion at policy and technical forums) the actions aimed at facilitating EMS implementation in developing countries should focus on:
 - Awareness-building among the concerned stakeholders;
 - Identification of sources and dissemination of information;
 - Creation of infrastructure, training auditors and consultants;
 - Assistance in developing and implementing related legislation;
 - Support for participation in relevant forums and for sharing experiences with the implementation of EMS. The Experts also urged the need for special financial and technical assistance for LDCs in implementation of the ISO 14001 standard at their national levels.

If government can illustrate how certification of internal systems to ISO 14,000 can benefit them and the running of public sector entities and businesses, promoting it to the private sector will become easier.

- Lobby for existing country specific performance standards, levels, targets and objectives and policies to be included in the environmental performance aspect of the standard. This will protect developing nations from context dependency while still incorporating performance standards. It will also serve to build the capacity of developing nations at the institutional level, if their standards are recognised and encouraged for development.
- Monitor the activities of TC 207 with great care. NGO dialogue is being facilitated and looked at by the TC 207 group and should be encouraged by government. NGO participation at the ground level could also serve to address the issue of legitimacy and environmental performance.

The last plenary concluded with 36 resolutions. Five major items topped the discussions. These were captured in:

- Resolutions to assist developing countries in actively participating in the work of ISO/TC 207;
- Resolutions to assist NGO interaction with ISO/TC 207 standards, and to continue the dialogue with NGOs;
- Resolutions to continue the dialogue with UNFCCC on possible ISO standards related to climate change and climate technology, with TC 207 taking a lead role;
- Resolutions to note that France and Korea will issue a new work item proposal to develop a document on “Design For the Environment”; and
- A resolution to create a Spanish task force to work on the translation of ISO 14000 standards into Spanish.

The following issues were also discussed:

- It was established that the main elements of compatibility between ISO 14001 and ISO 9001 had been achieved. The Strategies Implementation Group (SIG), who had met on May 28th, 1999, has validated this.
- The Climate Change/Climate Technology initiative got a strong boost ahead as TC 207 declared its will to lead the ISO drive with coordination efforts continuing within the ISO structure and with the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC).
- The 7th meeting of ISO/TC 207, *Environmental management*, was deemed a success. Delegates were happy that TC 207 continues to be a leader as it breaks new ground. TC 207 accepted the Swedish invitation to hold its 8th plenary session, in Stockholm in June 2000.
- Encourage industry groups (especially the growing number of dirty industry groups) to participate where possible. A proactive approach towards ISO 14,000 and standardization in general may allow for greater awareness and education of industry with respect to meeting standards in child labor, health and safety issues and awareness in general of environmental issues that are sector specific. Such standardization will also allow for differentiation between firms that engage in such practices from those that do not. Particular emphasis should also be paid to how SMEs can be organized and leveraged to compete in the global market place through the adoption of such standards. Specific to Pakistan, can the basic shell of an EMS work as a template to facilitate cooperation and better organization among indigenous farmers?
- To this end, Pakistan should encourage cooperation between SMEs and larger firms to ensure that the smaller, informal sectors are not left out of the process of certification.
- A best available practices approach should be pushed for by Pakistan that will ensure that developing nations are given space and empowered to choose practices and definitions of environmental friendliness that suit our specific environmental and ecological make up. It should also be emphasised that Japan, France and the Netherlands instituted similar approaches in the 1960’s with much success.
- There is a possibility that Pakistani suppliers may be pressured to demonstrate ISO 14001 certification and failure to do so could result in barriers to trade and/or detract from the environmental objectives of setting up an EMS. Ideally, foreign corporations should establish supportive co-operation with their suppliers in Pakistan in the area of EMS implementation. Trans national corporations (TNCs) could play an important role in this regard.

- General reference to the guidance could be made within an international environmental management standard. ISO TR 14061 for example, lists many international agreements where forestry is discussed.
 - Work as observers while maintaining minimal expenditure. Work to disseminate information to firm leaders and trade associations and clusters. Work towards establishing a like-minded group within the developing nations to ensure that Pakistani concerns, specific to sectors of interest and agriculture, are heard.
 - ISO 14,000 is being used in the west to manage risk and attract investors. From Pakistan's perspective, using such a strategy is also suitable given firms desire to encourage the cycling of local investment and increasing savings.
 - As the formulation of the ISO 14,000 series will affect the efforts of developing country businesses to gain access to developed world clients and markets, Pakistan should encourage active participation from industry sectors. Mature firms with strong export interests should be encouraged to:
 - Monitor ISO 14,001 development activity specific to their sector,
 - Establish in house EMS' (benchmarked informally with ISO 14,000) and examine success through marketing to foreign firms,
 - Consider the impact of global standards on Pakistan's producers and identify ways in which the required process of upgrading can be facilitated,
 - Explore the role of key local and external agents in this process (donors, domestic buyers, and international buyers, trade associations, government agencies).

The risks to Pakistan's economy include loss of jobs through the import of foreign, capital intensive technology, buy out of local firms which support the local business culture and an increased presence of foreign influence through MNCs and TNCs which will further threaten our sovereignty. What limited time should be spent focusing on the development of the strongest sectors, niche players and industries so as to convey a proactive feeling towards foreign buyers and begin the process of sustainably developing our industrial sectors.

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