

Technology Mechanism: Need for country-driven approach

At a two-day expert workshop in Bangkok held from 4-5 April, participants stressed that the Technology Mechanism must be a country-driven process with developing countries setting out their own needs. Also discussed among other matters, was the relationship between the Technology Executive Committee and the Climate Technology Centre and Network, the governance structure of the Centre and its relation to the Network as well as the issue of IPRs and technology assessment.

Bonn, 6 June (Meena Raman*) – As the next round of climate negotiations takes place from 6 to 17 June in Bonn, Germany under the United Nations Framework Convention on Climate Change (UNFCCC), a key issue on the agenda for consideration of Parties is that of technology development and transfer.

In Cancun, at the 16th meeting of the Conference Parties (COP), a decision was adopted to establish a Technology Mechanism comprising a Technology Executive Committee and the Climate Technology Centre and Network. This was the outcome of the Ad-hoc Working Group on Long-term Cooperative Action under the UNFCCC (AWG-LCA).

In Bangkok, at a two-day expert workshop (4-5 April 2011) many critical issues were raised on how to operationalise the Technology Mechanism (TM) with a view to achieving a fully operational and effective mechanism in 2012.

One area of convergence among participants was for the TM to be a country-driven process with developing countries setting out their own needs.

Parties from developing and developed countries as well as experts that included presenters from South Centre, the United Nations Environment Programme (UNEP), and the Consultative Group on International Agricultural Research (CGIAR) exchanged views.

The workshop was facilitated by Jukka Uosukainen of Finland who asked Parties to address:

(i) the relationship between the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTC&N);

(ii) the governance structure and terms of reference for the CTC&N and how the CTC will relate to the Network;

(iii) the procedure for calls for proposals and criteria to be used to evaluate and select the host of the CTC&N;

(iv) the potential links between the TM and the financial mechanism; and

(v) consideration of additional functions for the TEC and CTC&N.

Uosukainen, in his report to the AWG-LCA on the outcomes of the workshop, (which was displayed at the UNFCCC website as he was not present at the plenary session of the AWG-LCA on 8 April), said that the workshop was very practical and dynamic with participants presenting their ideas and exchanging views on how to achieve a fully operational Technology Mechanism by 2012. He said this meant that Parties will need to work hard this year to define the following:

(i) the terms of reference and governance structure for the CTC&N;

(ii) the criteria and selection procedure for the host of the CTC&N;

(iii) the relationship between the TEC and the CTC&N to ensure coherence, and the reporting lines of these two bodies within the Convention;

(iv) how Parties are going to finance the TM; and

(v) how the TM is going to interact with other parts of the international climate change architecture in the most efficient and effective way.

He said that there was a high level of convergence among Parties on many aspects of the design of

the CTC&N. According to Uosukainen, many participants emphasised the need for a prompt start to the TM and suggested that the CTC&N could start small and be flexible so that it can grow over time in response to the needs from developing countries.

All participants emphasised that the TM must engage the private sector at many levels, and leverage its expertise and resources to accelerate and scale up technology development and transfer, he further said.

On the governance and Terms of Reference (TOR) of the CTC&N, Uosukainen said that participants generated many ideas on how to achieve both accountability and a flexible and innovative CTC&N that is responsive to the needs of Parties and is responsible to the Convention. From the discussion, many possible elements of the TOR were identified, he added.

Another key point he noted was the role of national institutions in relation to the CTC&N to ensure a country-driven approach and to build in-country capacity over the long term.

On the procedures for the selection process for the host of the CTC&N, he said that participants emphasised the need for transparency and for a well defined set of criteria. He added that participants suggested specific ideas for a list of criteria that will be useful to discussions in the more formal setting of the AWG-LCA.

On the relationship between the TEC and the CTC&N, Uosukainen said that there were different views on the role of the TEC in guiding or governing the CTC&N. He said that participants emphasised the importance of achieving a coherent TM.

On the issue of financing the TM, he said that all participants emphasised the need to ensure adequate and stable financial support for the operations of the TM, including for the services that would be provided by the CTC&N.

There was a need to identify sources of finance in the short term for the prompt start of the TM, as well as long-term sources that will allow it to grow and develop in response to the needs of Parties, he said further. The question of whether there should be a specific funding window for technology development and transfer was also discussed, he said.

On the links between the TM and other parts of the UNFCCC climate change architecture, Uosukainen said that participants were of the view that the TM would be an important part of the international climate change architecture that would need to interact with all other components, particularly the bodies supporting adaptation, mitigation and finance. The focus should be

on efficient and direct linkages that do not create additional layers of complexity.

India, in reflecting on the various presentations from Parties said that it saw convergence emerging on the following matters: (i) the need for a country-driven process with developing countries setting out their own needs; (ii) the CTC being an enabling centre which receives requests from Parties and is in touch with a team of experts, and be located in an existing institution and there is a group who will be in it, with a CEO; (iv) when services are provided, these are provided by teams of service providers in the Network who can be drawn from a certain number of organizations which can put together a team.

India said that there was a good discussion on some issues although there was no convergence and identified 3 such issues: (i) the size of the CTC; (ii) governance of the CTC and attention is needed on the issue of transparency of the governance process and its responsibility to the COP; and (iii) the vexed issue of intellectual property rights (IPRs) and how to address this. It said that there was need to establish a process to on how to move on the IPR issue.

Following calls by some developing countries for the TEC to address the issue of IPRs, the United States said that it was agreed in Cancun that IPRs are not a hurdle to technology transfer.

Following is an account of the presentations by various Parties and experts.

Dr. Jonathan Pershing spoke for the **United States** said that there was need to elaborate on the specifics to move rapidly to operationalise the CTC&N, including enabling the issuance of request of proposals in Durban (South Africa, where the next COP meeting will be held in December 2011) to host it.

For this purpose, it was useful to discuss the objective, core responsibilities, tasks, governance, relationship between the Centre and Network. It said that the CTC&N could help developing countries identify and implement technology projects strategies to enhance low emission climate-resilient development. It was not to do basic research or provide money or allocate intellectual property but to draw from others.

On how the CTC&N could deliver results, the US said that it could be a significant new avenue for technical assistance in identifying and securing appropriate technologies. In this regard, it could be the first stop for technology information, analysis tools, best practices and ideas on financing options.

It can help in identifying technology needs and options as well as policy barriers based on country requests. It could also provide access to a global network of regional

and sector experts for knowledge sharing to build capacity and knowledge.

On the tools to deliver results, the US said that there could be expert team responders drawn from the Network of institutions both in developed and developing countries and support in-country visits and provide capacity building for project or policy proposals for example on feed-in tariffs or solar panels.

There could be trainings which could be country, region or issue specific. There could also be identification of funding through the use of the CTC&N financial and business planning expertise to advise on how to structure project finance or programmes. The eventual goal is for the CTC&N “stamp” to enable funders to know that the project/programme has been vetted.

It said that there were many models for the structure to work but it should be results-oriented, cost-effective and efficient. Among the considerations could be: (i) for the centre to play a coordinating role, matching requests to right parts of the Network; (ii) a single centre or regional but should not be too many; (iii) for the Network to undertake most of the substantive work; (iv) the Network is arranged in sectoral areas such as in renewable (energy), efficiency, water, agriculture etc. and (v) the private sector and academia could have an important role in the Network.

The US gave an example of the CTC&N in action. A country contacts the CTC with request for assistance in securing a type of project or policy. If accepted, a case manager is assigned to help ensure transparency and responsiveness. The CTC works with the country to develop a work-plan and timeline; define the project scope; identify the Network team and consult with stakeholders.

The US also raised questions about the budget for the CTC&N as to how much goes to the Centre versus the Network. On the structural issues to be resolved, it identified the following: responsibilities of the Centre versus the Network; Network membership; collaboration with the private sector and academia; accountability, oversight and reporting including the governance system for e.g. if the CTC&N should be run by a Board of Governors.

Dr. Ajay Mathur spoke for **India** said that the CTC has 3 functions viz. to stimulate technical development and transfer; provide technical assistance and facilitate and establish networks. A developing country makes a request to the CTC for e.g. to develop a project for installation of renewable energy. This could involve project preparation, capacity building or innovation or encompass all 3 aspects.

The Centre will ask a group of experts to respond to the request which is a Network to provide services. The

Network is self-organised and could be at the country, regional or international level. The Network needs a hub or a coordinator which draws on various experts including regional experts, sectoral experts, industry experts and financial experts.

Initially, no networks exist. The CTC will need to facilitate the establishment of networks that respond to country requests. The developing country partners need to provide early intimation of the kinds of requests and of the volume of requests. The CTC may assess the feasibility of the requests and prioritise requests. The CTC may, through a transparent process, invite, evaluate and select a consortia/network that meets the requests. Future requests may be directed to the appropriate network.

In the selection of the CTC, India said that there was need to ensure experience in technology development and transfer, innovation in technology and business models, collaborative actions and project management. It must have the capability to host the CTC in terms of office space, expatriate staff and logistic support and provide access to technical, human and financial resources. There must be willingness for long-term commitment as well as financial, infrastructural and human resource support. There must be ease of travel and connectivity and should preferably be in a developing country.

On the activities of the CTC, India said that it should receive developing country requests for technology development and transfer, and identify the appropriate network to respond to the requests. It must stimulate collaboration with a range of institutions for technology development and transfer. It must enable learning and transfer of experience and knowledge as well as manage the request-response process and facilitate the necessary funding to enable timely implementation by the appropriate network.

On the governance structure, the CTC should have a governing body of senior technical experts drawn from various countries (both developed and developing), elected by Parties. The governing body will provide policy on issues such as prioritization, operational criteria and guidelines, human resource policies, response to requests, timelines and appropriateness of response and budget, resources, audit etc.

The TEC could be the governing body of the CTC.

In relation to the financing of the CTC&N activities, the core funding could come from the Green Climate Fund, the host country/institution and other donors. The activity funding could also come from the Climate Fund as well as from donors, host country and the private sector.

Tomasz Chruszczow for the **European Union** said that it envisioned the CTC as being light with a small team with a clear and effective structure and is cost efficient and able to undertake administrative support. CTC is to be small compared to the Network and should only play the facilitator role, with a country-driven approach being assured.

The Network should be as flexible as possible, facilitating a project/country driven approach based on 'national circumstances and priorities'.

For the EU, the terms of reference of the CTC should focus on how to facilitate the Network and manage information; collect and maintain information on the Network members; collect and receive nominations; set up and maintain database, web-based networking and registration tools; seek memberships amongst relevant existing organizations; promote and stimulate cooperation between the members of the Network; information and reporting on activities; engagement with Network members and disseminate information on Network members.

The key role of the Network is to advice and provide support for identifying technology needs and implementing technologies on the ground; support networking and capacity building for developing countries; stimulate technology development and transfer e.g. through public and private collaboration at all levels; disseminate good policies and best practices for technology planning and diffusion. The Network should be open to applications and draw from existing public and private institutions; help improve the quality of projects to make them more fundable; and make information available for the identification of potential funding sources, as appropriate.

The EU stressed the need for a country-driven action based on national circumstances and priorities. It said that the CTC catalyzes action in developing countries by facilitating information and access to a network of organizations and initiatives; connects institutions and makes information available on them with the purpose to facilitate/enhance action on technology development and transfer in support of action on mitigation and adaptation, stimulate North-South, South-South cooperation; provide information on the organisations and initiatives but Parties will have the final decision on the partnerships for collaboration.

On the selection process of a host for the CTC, the EU said that the process should be open, transparent, fair and neutral and the host should inter alia demonstrate expertise and knowledge of technological processes. The EU expressed the preference of the CTC as an intergovernmental institution within the UN system.

As regards the link between the TEC and the CTC, the EU said that both these institutions are to promote coherence and synergies in relation to technology transfer. The CTC facilitates access to a Network and shall operate independently within its TOR and take into account the strategic guidance provided by the TEC. The CTC and the TEC will report on an interim basis to the subsidiary bodies of the UNFCCC and the TEC recommendations are to be provided directly to the COP, which decides which recommendations it will take into account.

In reference to some developing countries calling for the CTC to be under the TEC, the EU said that the TEC and CTC are in "different worlds" and there is no hierarchy between them.

In relation to the TEC's relationship with other institutional arrangements, the EU said that there should be a clear separation between the strategic policy level advice from the TEC and operational aspects related to the work of the entities entrusted with the financial mechanism.

There was need to ensure that the Technology Mechanism is not a stand-alone arrangement but should enhance synergies with other institutional arrangements.

Bolivia's Ambassador Pablo Salon presented on the CTC governance structure and its Terms of reference (TOR). He stressed that the explicit goals of the CTC are to enable the transfer of skills and know-how to use, operate, maintain as well as to understand the technology hardware; promote research and further independent innovation by developing countries; facilitate the development of technology through imitation or reverse engineering to adapt it to local conditions; finance and acquisition of equipment and innovation; identify, suggest and promote initiatives to remove obstacles for technology transfer to developing countries such as intellectual property rights; support the recovery and promote traditional and indigenous knowledge; and support the evaluation, in an independent manner and without conflict of interest, of the potential environmental, health, social, and economic impacts of new technologies before they are spread.

Bolivia also emphasized the importance of safeguards in relation to the use of technologies and said that many dangerous technologies have been released in the market before their environmental or health impacts are known, or before their social and economic impacts on poor people and developing countries are understood. This, it said, is currently the case with genetically modified organisms, agrochemicals, biofuels, nanotechnology and synthetic biology. Further, geo-engineering and all forms of artificial manipulation of

the climate should be prohibited, said Bolivia, for they (bring) enormous risk of further destabilization.

Bolivia also cautioned that the CTC should not be reduced to a show case for sale of new technologies by developed countries and should not be a source of monopoly profits.

In terms of structure, Bolivia sees the CTC as operating under the TEC. At the national level, it should be led and coordinated by the national state-involved entities. At the regional level it is necessary to identify existing entities that can coordinate the CTC. It should not only be limited to public-private partnership but also public-public partnership and public-social partnership.

Bolivia also identified several obstacles for technology transfer which included finance, high cost of certain technology and equipment suppliers, inadequate laws and regulations, lack of absorptive capacity, shortage of skilled personnel, poor infrastructure, and intellectual property rights (IPRS), particularly patents and trade secrets.

On the issue of IPRs, Bolivia said that it is often argued that availability of effective IPR protection provides foreign companies an incentive to transfer protected technologies to developing countries and will encourage the inflow of FDI (foreign direct investment). It said that the availability (and enforceability) of IPRs is by no means a sufficient condition for an increase in FDI or for transfer of technology to occur. Countries with weak IPR regimes have been among the major technology borrowers (e.g. South Korea, Taiwan, Brazil in the years preceding the coming into force of the World Trade Organization), while many countries (including many African countries) with IPR regimes comparable to those of developed countries have a poor record of being technology importers.

It said that strong IP protection means that the IP holder can control the use of his technology, and decide when, where and how to use it and whether to transfer it and the ways in which the technology can be utilized, if at all, in those countries where protection has been obtained.

Bolivia pointed out that 10 developed countries account for 84% of resources spent on R&D (research and development) globally, control 94% of the technological output in terms of patents taken out in the US between 1977-2000 and received 91% of global cross-border royalties and technology licensing fees in 1997.

Bolivia cited the example of India where prior to 1970, when India allowed patent protection for pharmaceuticals, multinational corporations dominated the supply of medicines and the Indian manufacturers supplied a much smaller share of the Indian market. It said that in 1970, the Indian law was amended and

patents on pharmaceutical products were not allowed, and provided some figures to show that over the years the share of the Indian pharmaceutical market supplied by domestic companies increased dramatically, and India moved from being a net importer of medicines to a net exporter, with exports to a large number of countries, including developed regions such as the United States and Europe and developing countries.

Bolivia said that as regards the CTC in relation to the issue of IPRs, it was important to identify the concrete IPR obstacles and propose alternatives, provide support in the use of flexibilities available within the TRIPS Agreement (such as the use of compulsory licenses, exceptions to patent rights, regulating voluntary licenses and ensure strict application of patentability criteria).

It said that the CTC must support in the development of proposals for national legislation that allowed more flexibilities in IPRs, initiatives to promote and fully benefit from innovations that are in the public domain and analyze and propose initiatives to deal with other patent issues.

Australia's Louise Hand wanted a country-driven CTC that is adaptable and responsive to national circumstances. It stressed the need for enhancing conditions necessary for investment and a key role for the private sector. The TM and its aspects must be leveraged around existing processes and structures and should be hosted by existing institutions. It said that both the TEC and the CTC&N are complementary and non-subservient, with each being accountable to the COP in its own right and report as such.

Dr. Al Binger spoke for the **Alliance Of Small Island States (AOSIS)** and said that the function of the TM and its key aspects should focus on creating the environment for more technology development and transfer. It should increase the availability of green technologies for development including social development. The TEC must be Party driven and the financial mechanism provides resources for development of projects. This must be an integrated approach.

On the issue of governance of the TM, AOSIS supported a distinct Board of Directors with regional representation, including from SIDs and LDCs (Least Developed Countries). The TOR should be decided by the COP, including fiduciary responsibility, and have oversight of the business plan, developed in response to the needs of Parties liaising with the TEC. There should also be operational oversight and reporting to the COP.

AOSIS presented two options for the appointment of the Board of Directors, which could either be appointed by the COP or the TEC.

In terms of the day-to-day functions, the TM must respond to the needs of developing countries. The funding should come from the financial mechanism under the UNFCCC and should be coordinated with the work of the TEC. Other functions include the preparation of reports and proposals for mobilizing financial resources, identify technologies to meet members' needs; develop strategies for further development testing/criteria for new technologies; facilitate collaborative agreements between the private sector and research institutes and facilitate training to help develop capacity.

On the staffing, it said that the key administrative officer should be an executive director with two deputy directors (one each for adaptation and mitigation); and sector specialists, with regional distribution mainly from developing countries. It should be located preferably within host institutions with technology development experience and international accounting standards and credible international status.

On the composition of the Network, AOSIS wanted the establishment of regional and national centres of excellence, with criteria set by the TEC. It said that initial members of the Network should be identified by the TEC and the membership be open to all who meet the criteria. There is need also to have memoranda of agreement between the CTC and institutions.

Apart from an effective and efficient technology transfer mechanism, AOSIS also called for capacity building support and a loss and damage mechanism to help SIDS recover from adverse climatic impacts.

Dr. Ainun Nishat of Bangladesh said that the major task of CTC will be, but not limited to, supporting the establishment of regional Centers and its networks; the selection of best available technologies; the diffusion of new technology; resolve issues related to IPRs; support R&D for hard and soft technologies as well as enable capacity building including skills training programs to its Network.

Bangladesh also envisioned the governance structure of the CTC to comprise of an Expert Group that will provide strategic guidelines to the CTC for technology selection, review, assessment, evaluation, and monitoring of technology innovation, development, deployment and diffusion as requested by its Networks. It also advocated the need for a secretariat that will be responsible for day-to-day management and in supporting the Expert Group.

It also proposed the creation of Regional Climate Technology Centers (RCTCs) to be set up in all the UN Regions as Networks of the CTC, with mandates of the RCTCs being similar to that of the CTC.

Japan's Mr. Jun Arima said that the main tasks of the CTC is to provide advice to developing country governments on technology needs assessment, low carbon development strategies and nationally appropriate mitigation actions (NAMAs) through its Regional Centers. It would also support developing countries to identify technology options and conduct capacity building/training programs and facilitate communications among "networks" of national, regional, sectoral and international technology centers, networks, organization and initiatives.

The CTC is also to provide support and advice to CTC&N members/network organizations to develop and implement projects related to technology transfer.

Japan said that technology transfer requires a tailor-made approach and the CTC should function as an efficient gatekeeper, which enables efficient implementation of technology transfer, and utilizes outside experts to respond to the needs and requests of developing countries. It also said that sectoral/regional approaches are effective to identify available technologies/experts and to create efficient networks to support developing countries. It wanted the CTC's operation to be prompt and flexible enough to engage companies. It proposed the CTC governing board to have 10 members in total with an Executive Director.

Mr. Can Wang of China said that there was need for an appropriate coordination, management and accountability system within the TM. It said that the TEC provides the broad framework, directions and strategy for technology development and transfer under the Convention and guides the CTC and Network. It said that the TEC could serve as the governing body of the CTC&N.

China wanted the CTC&N to be accountable to the TEC, which could ensure that its activities are closely aligned with the needs of developing countries. The CTC&N would report to the TEC, through which the report of the TM as a whole would be submitted to the COP.

On the linkage between the TM and the financial mechanism, China said that there was need for a specific window for technology development and transfer. The TEC would recommend the policies, programme priorities, eligibility criteria for support and actions that are necessary to accelerate technology development and transfer. The TEC would have a role of overseeing and providing recommendations for the review process of the operating entities of the financial mechanism. It said that the TEC would also have a role in the regular performance evaluations of projects. The results of the evaluations would feed into the TEC's guidance to the

CTC&N and on programme priorities, policies and eligibility criteria to the COP.

China said that the additional functions of the TEC could be to evaluate the performance of development and transfer of environmentally sound technologies in terms of speed, range and size of the technological flow; measure, report and verify (MRV) the technology support for developing countries actions on mitigation and adaptation and properly deal with IPRs.

Dr. Carola Borja of **Ecuador** addressed the issue of additional functions for the TEC and proposed two key functions which relate to policy and enabling functions to remove technology transfer barriers for adaptation and mitigation actions. This was needed, it said, as developing countries faced many challenges in relation to technology transfer that included the high prices of technologies that prevent its adequate use by developing countries; IPRs; technologies that are not adequate for the realities of developing countries and the lack of resources to devote to research and development in developing countries.

Ecuador presented data showing how OECD countries dominated the field of clean energy technologies through patents.

As regards the policy functions of the TEC, Ecuador said that this included ensuring that environmental-climate related technologies are in the public domain and free of patents. The TEC should foster technology disaggregation; influence multilateral entities to enact policies to facilitate the transfer of clean technologies and reduce IPR barriers; guarantee the access to the needed resources for capacity building, at a sectoral level according to the priorities of each developing country; lead to innovation through the development and improvement of endogenous technologies and determine policies to develop the “know-how” for the new and existing technology, research and development needs.

On the enabling functions, Ecuador said that the TEC should provide the means to facilitate the establishment of technology transfer sharing arrangements between providers and users; find enough resources to transfer technology; build institutional arrangements so that developing countries can have easy access to technology providers; encourage developing countries to conduct their technology needs assessments; facilitate the mapping of technologies available from developed countries; foster the exchange of experiences and technological solutions and once a technology is developed, it becomes part of the public domain for easy and fast transfer to countries who are in need of it.

It said that the TEC should recommend actions to address the barriers to technology transfer through

policies and enabling functions and deal with the necessity of applying a flexible system of IPRs with respect to clean technologies.

Mr. Aziwimpheli Makwarela of **South Africa** proposed some additional functions of the TEC which included examining the draft work programme and the budget of the CTC and making recommendations to the governing body of the TM (represented by the Parties); reviewing the implementation of the approved work programme and reporting back to the governing body; elaborating on the medium and long-term potential of the CTC’s programmes and planning, including specialized and new fields of research, and making recommendations to the governing body and assisting the heads of the CTC&N on all substantive, scientific and technical matters concerning the activities of the CTC, including co-operation with other centres and networks.

Mr. Martin Khor of the **South Centre** was one of the experts invited to share perspectives on the form and content of the TM. He said that the big challenge was to combine the big policy issues relating to technology transfer, while seeking to stimulate a bottom-up approach.

He said that the functions of the TM must include helping developing countries identify technology needs in the different sectors; help to assess which technologies are suitable (environmentally-sound, socially appropriate and efficient economically) and identify the policy and other barriers for access to technologies at affordable prices.

Khor said that there were three kinds of technologies relevant to this discussion viz. technologies in the public domain which needed to be expanded; technologies with proprietary rights, where there is scope to exploit the flexibilities under the WTO’s TRIPS (Trade-related Aspects of Intellectual Property Rights) agreement, including compulsory licensing; and future technologies that require international cooperation in R&D and for this to be in the public domain and that could be funded by the TM.

Khor said that adaptation of technology relates to transfer skills, equipment and climbing up the technology chain. The role of the public and private sector such as SMEs (small and medium sized enterprises) need to be supported as well as public sector investment especially in energy and water.

He highlighted that in technology needs assessments (TNAs), the issue of greenhouse gases was only one aspect. Other aspects that are critical to the TNA process include sustainable development aspects such as jobs creation, poverty, health and social and economic cost factors.

He stressed the need for a bottom-up process that helps build technological capacity at the base in developing countries. He said that while the Network can be dense with bases at the country level, the global structure of the CTC should be quite light. He cautioned against a big top heavy global CTC structure.

In this context, Khor gave two examples of the IPCC (Intergovernmental Panel on Climate Change) and the Montreal Protocol Fund (related to ozone depletion) models. In the case of the Montreal Fund, he pointed out that it works because they established ozone national focal points in various countries. The CTC could function in a similar fashion as the IPCC or the Montreal Protocol Fund with a light secretariat, voluntary technical committees plus networks utilizing an implementing agency such as the UNDP (UN Development Programme).

Mr. Emile Frison from the **Consultative Group on International Agricultural Research (CGIAR)** shared some lessons. He said that it was important to keep the TM simple and avoid complexity so that there could be creativity without a bureaucratic organization. There is

need to build trust and the principles must be agreed to before legal experts write agreements.

Mr. Mark Radka from **UNEP** said that from its case studies, attributes of successful centres and networks showed that there must be shared interests among partners, with strong incentives for collaboration; stable and long-term funding and political support; clearly defined missions and metrics; open and efficient information sharing; commitment from senior managers; participation of both public and private sectors; flexibility to respond to evolving conditions and opportunities; integrated approaches to R&D, demonstration and deployment; appropriately sized networks for effective cooperation and provision for capacity building of members where needed.

Many of these issues raised in the April workshop are expected to be considered at the June meeting of the AWG-LCA in Bonn.

(* With inputs from Majorie Williams)