



United Nations Conference on Trade and Development

Distr.: General
15 February 2010

Original: English

Trade and Development Board

Investment, Enterprise and Development Commission

Second session

Geneva, 26–30 April 2010

Item 6 of the provisional agenda

Promoting and strengthening synergies among the three pillars

Progress report on the implementation of the provisions of the Accra Accord related to the areas of work on science, technology, innovation and ICTs

Note by the UNCTAD secretariat

Executive summary

This report provides information on the implementation of provisions of the Accra Accord related to work on science, technology and innovation (STI) and information and communication technologies (ICTs) since the first session of the Investment, Enterprise and Development Commission. Thus it deals with the areas defined in paragraphs 158–161 of the Accra Accord. The report places particular emphasis on the promotion and strengthening of synergies among the three pillars of UNCTAD's work, and gives examples of the impact of UNCTAD's work in relevant areas. The work is carried out – inter alia – in close cooperation and through joint programmes with other international, regional and national institutions active in the fields of science, technology, innovation and ICTs.

1. UNCTAD's work on science, technology and innovation (STI) and ICTs is governed by paragraphs 158–161 of the Accra Accord. During 2009, UNCTAD continued to assist all developing countries in their STI and ICT activities. In 2009, 77 developing countries benefited from at least one of the programmes and activities in these areas of work. The programme continued to ensure a balanced geographical coverage of its services while paying particular attention to the least developed countries (LDCs). In 2009, the Science, Technology and ICT Branch of the Division on Technology and Logistics provided support to 32 out of the 49 LDCs (65 per cent), to 20 of the landlocked developing countries (LLDCs) (65 per cent), and to 16 small island developing States (SIDS) (42 per cent) – most particularly through training.

Box 1. Accra Accord, paragraph 158

UNCTAD should further strengthen its research and analysis in the area of science, technology and innovation, including ICTs, and should promote effective international and national policies, in collaboration with other relevant international organizations working in this area. It should also draw lessons from successful experiences with the transfer and diffusion of technology through all channels, including foreign direct investment (FDI). It should also enhance its support to the efforts by developing countries, in particular LDCs, to respond to technological changes and assess the effectiveness of domestic innovation policy. UNCTAD should help strengthen North–South and South–South cooperation in harnessing knowledge and technology for development, and assist developing countries and countries with economies in transition through science, technology and innovation policy reviews and related technical assistance.

2. In accordance with paragraph 158 of the Accra Accord (box 1), UNCTAD strengthened its research and policy analysis on STI and ICTs, with activities including two flagship reports (the 2009 issue of the *Information Economy Report* series, and the first issue of the *Technology and Innovation Report* series) and the organization of a number of expert meetings examining STI- and ICT-related issues and their impact on development.

3. In the area of STI, research and analysis in 2009 focused on the issue of raising agricultural productivity in developing countries. This subject remains of central importance to many developing countries, where the agricultural sector is often a key economic activity responsible for employing the majority of the population. The importance of raising agricultural productivity has been further accentuated in recent years owing to the international food crisis and the growing impact of climate change.

4. The first issue of UNCTAD's *Technology and Innovation Report*¹ examined the challenges of improving agricultural performance, in particular in Africa, and the role of STI, in increasing agricultural production and the incomes of smallholder farmers. The report asserted that improving the mix of available agricultural technologies and strengthening the innovation capabilities of smallholder farmers were necessary in order for the first Millennium Development Goal – the eradication of extreme hunger and poverty – to be achieved. However, STI will only be fully effective when policymakers at all levels – globally and locally – exercise the appropriate political will and institutional support to enable the innovative application of currently available technologies.

¹ UNCTAD (2010). *Technology and Innovation Report: Enhancing Food Security in Africa through Science, Technology and Innovation*. United Nations publication. UNCTAD/TIR/2009. New York and Geneva.

5. Three critical policy areas for enhancing agricultural productivity and addressing food security in the short term are: (a) improving human and institutional capacity for innovation; (b) empowering the participation of farmers in the processes of policy and programme design; and (c) developing effective farmer outreach and support systems. The *Technology and Innovation Report* suggested that the current trend towards declining agricultural productivity in many developing countries could be reversed if the right technologies were matched with support in these policy areas. Looking at medium- to long-term issues, the report highlighted future developments that are likely to affect agricultural production and food supply – such as climate change and bioenergy issues – and that are likely to help achieve sustainable agriculture production in order to eradicate hunger. The report concludes that, rather than proposing a single overarching message to solve the food security problem, solutions should be sought in a multiplicity of concerted and coordinated policy and STI activities exercised on many levels.

6. The research and analysis conducted during the preparation of the *Technology and Innovation Report* also allowed the identification of a number of initiatives and best practices in the area of South–South and triangular cooperation in STI that were fed into the substantive documentation for the Multi-year Expert Meeting on International Cooperation: South–South Cooperation and Regional Integration at its second session (14–16 December 2009), which focused on sustainable agricultural development and food security in developing countries.

7. Research and analysis were also conducted in preparation for the second session of the Multi-year Expert Meeting on Enterprise Development Policies and Capacity-Building in Science, Technology and Innovation, which took place in Geneva from 20 to 22 January 2010. This meeting discussed the key elements of STI policy frameworks and related policy-oriented indicators. Experts stressed that sound STI policies required appropriate STI indicators that were compatible with the context of developing countries. Furthermore, the meeting addressed how to promote the development and use of relevant STI indicators, based on which effective policy recommendations could be made. Experts encouraged UNCTAD to continue exploring – with other stakeholders – the possibility of producing a common list of STI indicators adapted to the realities of developing countries and LDCs. This work should be conducted in collaboration with other international and regional organizations that aim to build capacities in developing countries, particularly LDCs; it should involve the collection and analysis of STI data to assist policymakers in their formulation of development-oriented STI policies. Experts noted that measuring innovation as an outcome remained a big challenge, as STI indicators frequently described inputs and conditions, rather than the effects of a positive set of policies. In order for indicators to be useful in the Millennium Development Goal process, they needed to provide some measurement of innovation in areas important for reducing poverty, including agriculture.

8. In December 2009, UNCTAD held the Ad Hoc Expert Meeting on STI Policies in Geneva. The meeting stressed the need for better integration of STI strategies in overall development policy. It was suggested that STI institutions should focus on becoming functional, proactive, and competent to address current and future developments. New approaches were needed to assess the level of STI activities, in order to capture those that occur outside the publicly funded or broadly publicized scientific or research and development (R&D) projects. The meeting also discussed the value and role of the National System of Innovation framework. The need for factual assessments of the effects of STI policies in the development context underscored the importance of cross-sectoral, inter-institutional and international collaboration.

9. In January 2010, the Ad Hoc Expert Meeting on STI Indicators was held in Geneva to examine possible avenues towards defining a set of core STI indicators relevant to developing countries. Experts also exchanged ideas about the capacity-building work

needed in order for developing countries to collect and exploit STI indicators for policymaking and monitoring. The meeting considered current related work undertaken at the global and regional level, and sought to draw lessons and identify possibilities for cooperation. It was found that while there were some data on research and development, patents and trade, few data were available on science, technology and innovation. Key issues related to the quality of STI indicators included the trade-off between the availability and the relevance of data, the importance of international comparability, and the role of indicators in support of policy design and implementation.

10. In the area of ICTs for development, the revamped *Information Economy Report 2009: Trends and Outlook in Turbulent Times* was published in October 2009.² The report was presented to journalists and other interested stakeholders at launching events in 14 cities around the world, often in collaboration with other agencies.³ The launching activities resulted in more than 150 news articles and in several radio and television interviews being given in national and international media.

11. The *Information Economy Report 2009: Trends and Outlook in Turbulent Times* took stock of recent trends with regard to extending connectivity worldwide, and explored policy options for countries seeking to improve connectivity. It also reviewed recent developments in enhancing the use of ICTs among enterprises.⁴ The potential implications of the economic crisis were discussed throughout the report, including the impact on ICT trade. The report noted some positive developments, including continued growth in mobile phone penetration and use in spite of the economic downturn; this underscores the tremendous opportunities that the use of ICTs represents. At the same time, narrowing the so-called “digital divide” remained a key development challenge. In particular, the “broadband gap” was becoming a serious handicap for companies in many poorer countries. The report found, furthermore, that trade in ICT goods had been very negatively affected by the economic downturn, while trade in ICT services had been more resilient.

12. During the last quarter of 2009, preparations began for the *Information Economy Report 2010*, the theme of which will be ICTs, enterprises and poverty alleviation. In this context, the Ad Hoc Expert Meeting on ICTs, Enterprises and Poverty Alleviation was held in Geneva in November, bringing together representatives from academia, international organizations, governments, civil society and the private sector. Discussions focused on how the production and use of ICT by enterprises could contribute to reducing poverty. The meeting was a venue for new insights, experiences and viewpoints from different countries and institutions working in the area of ICT for development. It also provided an excellent opportunity for networking with the community of ICT experts.

13. In line with paragraph 158 of the Accra Accord (box 1), UNCTAD paid particular attention to the experiences of developing countries in transferring and diffusing technology, and to the lessons that could be drawn. UNCTAD worked to support their efforts – and particularly those of LDCs – to respond to technological changes and to assess their domestic innovation policy.

² UNCTAD (2009). *Information Economy Report 2009: Trends and Outlook in Turbulent Times*. United Nations publication. UNCTAD/IER/2009. New York and Geneva.

³ Geneva, Addis Ababa (with ECA), Bangkok (with ESCAP), Beirut (with ESCWA), Cairo, Helsinki, Lima, Manchester, Montevideo (by video), New Delhi (with UNCTAD India), New York (Headquarters), Stockholm, Tunis and Washington D.C.

⁴ The chapter presented the results from UNCTAD’s 2008 global survey of national statistical offices on ICT usage by businesses and on the ICT sector. The complete data are included in the UNCTAD Information Economy Database, which is set to go online during 2010.

14. In addition to the *Technology and Innovation Report*, which provided analysis of the transfer and diffusion of technologies in agriculture, UNCTAD's other main area of support on STI for LDCs was the *STI Policy (STIP) Reviews*. The *STIP Review of Angola* was finalized and published in 2009. The review on Lesotho was largely completed during 2009; it focused on the institutional arrangements needed to implement the STI policy that had been designed by Lesotho in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO). The *STIP Review of Mauritania*, which experienced delays due to extraordinary political events in the country, was also completed in 2009, following new elections and the normalization of international relations. The review focused on STI capabilities at the national level and in the mining and oil industries. It called for a more focused effort to strengthen the skills base and STI capabilities in support of national development in the context of a national strategy. The *STIP Review of Ghana*, which was undertaken in collaboration with the World Bank, will be published following peer review and clearance. The review examined R&D and innovation systems, along with STI capabilities, at the national level. Special attention was paid to agriculture, herbal medicine, and ICTs in the education system. The review made a number of suggestions for improving the R&D and innovation systems, better harnessing STI capabilities to support industry, and better reflecting STI in the national development strategy. Some of the preliminary findings of the reviews on Ghana and Lesotho were presented and discussed at the twelfth session of the United Nations Commission on Science and Technology for Development (CSTD), which was held from 25 to 29 May 2009 in Geneva, and which led to a sharing of national experiences among developing countries on national STI policies and strategies. During 2009, preparatory work began on STIP reviews for the Dominican Republic, El Salvador and Peru.

15. UNCTAD held the Single-year Expert Meeting on Green and Renewable Technologies as Energy Solutions for Rural Development (9–11 February 2010). The aim of the meeting was to bring together experts, practitioners and policymakers to deliberate on strategies to harness renewable energy technologies for sustainable rural development. It addressed policies and measures to encourage technology transfer and the strengthening of local innovative capabilities.

16. In response to the part of paragraph 158 of the Accra Accord that deals with South–South cooperation in the context of STI (box 1), work continued during 2009 with UNCTAD's Network of Centres of Excellence – a programme targeted at building capacity in the scientific community in developing countries, particularly in Africa, through South–South cooperation. The network leverages leading scientific and technological institutions in developing countries for training courses for developing-country scientists. The network hosted a training course in October 2009 in Tunis on cybersecurity, which provided training and networking opportunities to 15 participants from African countries.

Box 2. Accra Accord, paragraph 159

UNCTAD should also contribute to consensus-building in the international debate on science and technology for development, including ICTs and their implications for development, and continue to provide support as the secretariat to the Commission on Science and Technology for Development. UNCTAD should continue to help developing countries to participate effectively in international discussions on technology transfer and knowledge-sharing, and to identify policy options and best practice in this area. UNCTAD should furthermore continue to assist developing countries in identifying ways and means to operationalize technology transfer clauses in international agreements and in the outcomes of major United Nations conferences and summits in order to maximize their potential benefits.

17. In line with paragraph 159 of the Accra Accord (box 2), UNCTAD made several contributions to consensus-building in the international debate related to STI and ICTs. As the secretariat for the CSTD, UNCTAD provided substantive and technical servicing to the twelfth session of the CSTD.⁵ Among other matters, the CSTD considered two priority themes:

(a) Development-oriented policies for a socio-economically inclusive information society, including policies relating to access, infrastructure and an enabling environment; and

(b) Science, technology and engineering for innovation and capacity-building in education and research.

18. As a contribution to the Economic and Social Council's Annual Ministerial Review theme for 2009, namely "Implementing the internationally agreed goals and commitments in regard to global public health", a special panel discussion was held, entitled "Delivering innovation in global public health". The session included a ministerial segment; more than 15 member States were represented at this segment at the ministerial level. The participants also included the heads of international organizations of the United Nations system or their representatives; representatives of the African Union, the Organization for Economic Cooperation and Development (OECD), the Islamic Development Bank and the World Bank; and representatives of civil society and of business entities.

19. The CSTD recommended the Economic and Social Council (ECOSOC) to a draft resolution entitled "Science and Technology for Development", containing calls for action by national governments and the international community.⁶ Participants furthermore urged the CSTD to play the role of "torch-bearer" for innovation and innovation-oriented planning, and to support efforts by national governments to integrate STI into national development strategies. They also called on all stakeholders to assist developing countries in their efforts towards narrowing the digital divide, particularly with regard to access, affordability, broadband speed, local content and data privacy. They similarly encouraged all stakeholders to continue to cooperate on – and to develop – ICT partnerships for capacity-building, technology and knowledge transfer, and research and development.

20. In collaboration with the Government of Switzerland, UNCTAD ran the CSTD Intersessional Panel from 9 to 11 November 2009 in Geneva. More than 70 representatives of national governments, international organizations, non-governmental organizations and the private sector participated. The panel provided an opportunity to study the various issues related to the priority themes that will be considered at the CSTD's thirteenth annual session, including new and emerging technologies, with a special emphasis on renewable energy technologies. In this context, panellists highlighted the need for North–South and South–South transfer of technology and corresponding know-how, as well as the central importance of building local innovative capabilities. The report of the Intersessional Panel will be made available to the thirteenth session of the CSTD, 17–21 May 2010.

21. In response to the call by ECOSOC for all its functional commissions to contribute to the theme of its 2010 Annual Ministerial Review, namely "Implementing the internationally agreed goals and commitments in regard to gender equality and the empowerment of women", preparations are under way to hold a panel entitled "Science, technology and gender" during the thirteenth session of the CSTD.

⁵ UNCTAD prepared reports of the Secretary-General on the priority themes (E/CN.16/2009/2 and E/CN.16/2009/3).

⁶ ECOSOC resolution E/2009/8.

22. UNCTAD provided substantive support to the sixty-fourth session of the General Assembly under the agenda items on science and technology for development, and information and communication technologies for development.⁷ Two resolutions were adopted respectively in December 2009 by the General Assembly under these agenda items.⁸

Box 3. Accra Accord, paragraph 160

UNCTAD should continue to provide technical assistance to countries in the area of ICT, notably on ICT policy reviews, pro-poor policies, legal and regulatory frameworks, and measuring the information economy, including through the Partnership on Measuring ICT for Development launched at UNCTAD XI.

23. In accordance with paragraph 160 of the Accra Accord (box 3), UNCTAD continued to provide technical assistance to countries in the area of ICT, in response to strong demand in 2009. Its technical assistance activities in this field reached all developing-country regions, relying partly on regular budget funds from the Development Account, and partly on extrabudgetary support from the Governments of Finland, France and Spain.

24. In the area of legal and regulatory frameworks, UNCTAD's technical assistance was aimed primarily at facilitating increased regional harmonization of cyber legislation, with projects in Africa, Asia, and Latin America and the Caribbean.

25. In Africa, the East African Community's Technical Committee for Information Technology considered a draft legal framework for cyberlaws prepared by UNCTAD, and recommended that the framework be adopted by the East African Community's Sectoral Council for Transport, Communications and Meteorology. In this context, UNCTAD also held a training workshop on the legal aspects of e-commerce for Burundi, in cooperation with the United Nations Commission on International Trade Law (UNCITRAL). UNCTAD also supported a workshop on the formulation and modalities for adoption of the Legal and Regulatory Framework for the Knowledge Economy, organized by the United Nations Economic Commission for Africa (UNECA).⁹

26. In Asia, workshops on the draft e-commerce legislation were held for key stakeholders in Cambodia and the Lao People's Democratic Republic. Additional requests for assistance were received in 2009, including from Albania, Botswana, Ethiopia and the Latin American Economic System (SELA). UNCTAD also provided comments on the revision of the OECD Guidelines on Consumer Protection related to e-commerce.

27. In Latin America and the Caribbean, the distance learning course on legal aspects of e-commerce was delivered to 90 participants from seven countries. This course was followed by a face-to-face regional workshop on cyberlaws, which reviewed existing laws and plans for the creation of a regional harmonized legal framework for internet-based commerce.¹⁰ A study entitled "Prospects for harmonizing cyberlaws in Latin America" was published in June 2009.¹¹ A similar study for Central America and the Caribbean is already under way. The studies provide a useful basis for the development of a harmonized legal framework for internet-based commerce.

⁷ UNCTAD prepared reports of the Secretary-General on the agenda items (A/64/168 and A/64/64).

⁸ A/RES/64/212 and A/RES/64/187.

⁹ UNECA Pre-CODIST and CODIST meeting. 28 April–1 May 2009. Addis Ababa.

¹⁰ Regional workshop on cyberlaws. 23–27 March 2009. San Salvador.

¹¹ Estudio sobre las perspectivas de la armonización de la ciberlegislación. UNCTAD/DTL/STICT/2009/1.

28. The *ICT Policy Review of Egypt* continued in 2009 and a final report should be ready in the first half of 2010.

29. In the area of measuring the information economy, UNCTAD's work during the past three years has been financed primarily by funds from the United Nations Development Account. The work programme and related technical assistance to countries on ICT measurement will need additional funding from 2010 onwards, especially to continue to develop methodological work on information economy statistics and to build capacity regarding their collection and analysis.

30. UNCTAD delivered three regional training courses on measuring the information economy during 2009: (a) for English-speaking countries in the Caribbean (in collaboration with the International Telecommunication Union (ITU) and the Economic Commission for Latin America and the Caribbean (ECLAC)); (b) for English-speaking countries in Africa (in collaboration with ITU and UNECA); and (c) for French-speaking countries in Africa (in collaboration with UNECA).¹² To support its training courses, UNCTAD's *Manual for the Production of Statistics on the Information Economy – 2009 revised edition* was presented at the fortieth session of the United Nations Statistical Commission in February 2009.¹³ This manual is an essential tool for national statistical offices involved in the collection of ICT data. It was translated into French by UNECA, and is being translated into Arabic by the Economic and Social Commission for Western Asia (ESCWA) and into Spanish by ECLAC. In addition, UNCTAD made substantive contributions to ESCWA and ECLAC regional workshops on ICT measurement. At the national level, direct technical assistance on information economy statistics was provided to Tunisia and Morocco, in the form of advisory missions.

Box 4. Accra Accord, paragraph 161

UNCTAD should contribute to the implementation of the World Summit on the Information Society (WSIS) action lines on capacity-building, an enabling environment, e-business and e-science, in cooperation with other relevant international organizations. UNCTAD, also in its capacity as secretariat to the Commission on Science and Technology for Development, should assist the Commission in implementing its mandate on the follow-up to the WSIS outcomes.

31. Particular attention has also been paid by UNCTAD to the implementation of the World Summit on the Information Society (WSIS), as requested in paragraph 161 of the Accra Accord (box 4). In the area of measuring the information society, UNCTAD continued to play a leading role in the context of the Partnership on Measuring ICT for

¹² In addition, in June, UNCTAD and ITU jointly organized a training of trainers to prepare five statistical experts to deliver the training courses developed by the two organizations.

¹³ UNCTAD (2009). *Manual for the Production of Statistics on the Information Economy – 2009 revised edition*. United Nations publication. UNCTAD/SDTE/ECB/2007/2/REV.1. New York and Geneva.

Development. The partnership's work on information society statistics contributes to assessing progress towards the achievement of the goals of the WSIS.¹⁴

32. Also in the context of the WSIS, UNCTAD co-organized WSIS Forum 2009 – together with ITU and UNESCO – which featured 600 delegates from approximately 100 countries. During the forum, UNCTAD organized the High-Level Panel on Better Life (together with UNESCO), the Action Line Facilitation sessions on enabling environment (together with ITU) and on e-business (together with the International Trade Centre).¹⁵ The session on e-business was organized as an interactive panel debate on e-business and poverty alleviation. The purpose of the meeting was to discuss how governments, international agencies, the private sector and civil society could contribute. The session was well attended (over 50 participants). UNCTAD also organized a session on measuring ICT for development (in cooperation with other members of the partnership).

33. Furthermore, in 2009, UNCTAD joined UNESCO, ITU and the United Nations Development Programme (UNDP) in the United Nations Group on the Information Society (UNGIS), to serve as chair or vice-chair on a rotating basis. In October, UNCTAD took an active part in organizing the first-ever “Open consultations on meeting the challenges of financing ICT for development”, in particular, backbone infrastructure and universal access to ICTs, applications and content, and capacity-building. The meeting noted that the financing issue remained important, and that there was no room for complacency. In order to meet the targets set out during the WSIS by 2015, more efforts were needed to support ongoing projects and launch new ones aimed at addressing remaining gaps, developing new content and applications, and building capacity.¹⁶

34. During the twelfth session of the CSTD, from 25 to 29 May 2009, the Commission reviewed the progress made in the implementation of the outcomes of the WSIS.¹⁷ It recommended ECOSOC to a draft resolution entitled “Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society”, containing calls for action to national governments and the international community. The CSTD was requested to hold, during its thirteenth session, a substantive discussion on the five-year progress made in the implementation of the WSIS outcomes.

35. At the CSTD Intersessional Panel, which was held from 9 to 11 November 2009 in Geneva, two themes directly related to the WSIS were examined in detail: (a) Follow-up: Improvements and innovations in existing financial mechanisms for ICT; and (b) Progress made in the implementation of and follow-up to the outcomes of the WSIS at the international and regional levels. On the theme of financing mechanisms, the panellists reviewed key developments since the WSIS, including new challenges and opportunities.

¹⁴ The work of the partnership is increasingly recognized. In its resolution 2009/7, the Economic and Social Council: “Recognizes the work of the Partnership on Measuring Information and Communication Technology for Development, its institutional strengthening and the creation of the working group to measure the economic and social impact of information and communications technologies, recalls Economic and Social Council resolution 2008/3, in which the Council acknowledged the work of the partnership to develop indicators, and recommends that the partnership consider the creation of benchmarks and impact indicators for further consideration by the United Nations Statistical Commission.”

¹⁵ http://www.itu.int/wsis/implementation/2009/forum/geneva/al_c7_e_busrn_pov_all.html

¹⁶ The report from the open consultations can be found at <http://www.ungis.org>.

¹⁷ UNCTAD prepared a report of the Secretary-General entitled “Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society” (E/CN.16/2009/10).

The discussion revolved around five areas: (a) policy frameworks and implementation strategies; (b) backbone infrastructure; (c) universal access; (d) applications and content; and (e) strengthening capacity and promoting opportunity.
