

5 TECHNICAL AND FINANCIAL CO-OPERATION PROGRAMMES FOR LDCS

Figure 2. Section 5 outline



5.1 Overview and key trends

This chapter draws mainly on information from annual notifications made under TRIPS Article 67 in the last 5 years as well as the summary analysis in Annex F and Annex G of this study.¹⁷² Annex F indicates whether or not each of the 33 LDC WTO member countries¹⁷³ has been explicitly stated as a direct beneficiary of technical assistance in Article 67 submissions by co-operation partners from the period 2008 to 2012.

Annex G details the reported direct assistance provided by each of the co-operation partners, (developed countries and IGOs) to the individual LDC WTO members from 2008 to 2012. The Article 67 matrices that accompany this report detail the origin and nature of the assistance received for each of the 33 LDC member countries with submission data. It must be noted that although a number of the LDCs were not reported as direct beneficiaries of technical assistance activities, they may have benefited indirectly from activities not reported here (e.g. LDC WTO members who are ARIPO member countries could have benefited indirectly from assistance provided directly to ARIPO on IP administration automation).¹⁷⁴

Based on this data, while recognising its limitations (relevant programmes that may not have been reported, and programmes that benefit more than one country), a number of key trends

¹⁷² As a supporting resource to this document, data for all annual notifications made under TRIPS Article 67 since 1995 have been compiled into matrices of technical assistance for each individual LDC members and submitted to the WTO. Where no specific references have been included in this section, the data source will be the matrices of technical assistance created by the Consultant.

¹⁷³ Lao PDR is not covered in Art. 67 submissions up to 2012 as it joined the WTO in 2013.

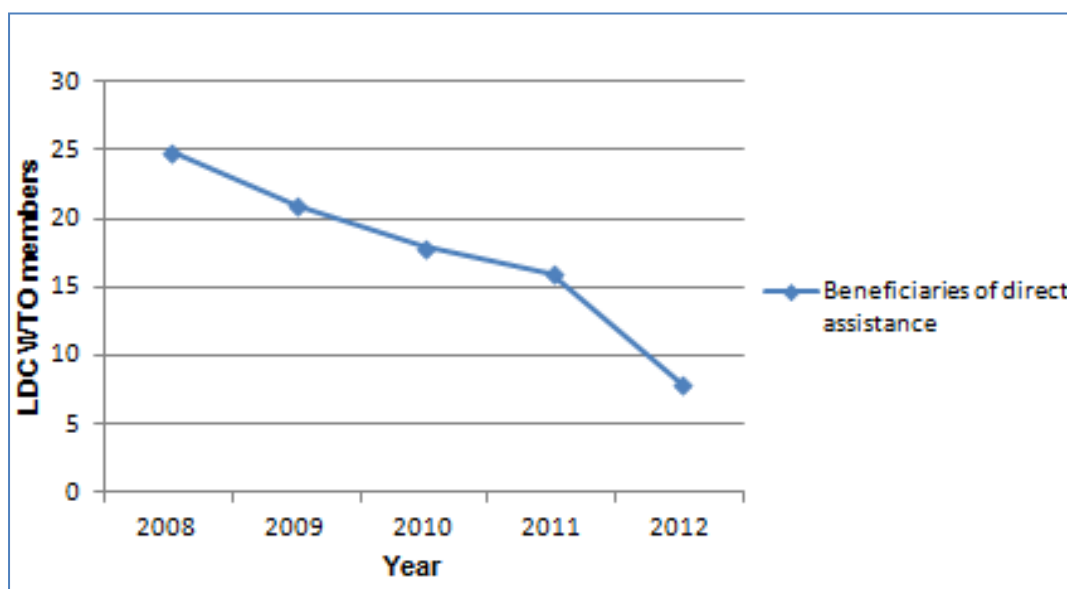
¹⁷⁴ Due to the limited time available for this study, we have not attempted to distinguish between or analyse the different types of technical assistance activities reported in Art. 67 submissions in terms of their thematic scope, value or the number of beneficiaries – where data on these variables is available.

can be highlighted regarding the overall provision of IP technical and financial assistance for the benefit of individual LDC WTO members over the period from 2008 to 2012:

- The number of LDC WTO member countries that have been explicitly stated as direct recipients of technical assistance under Article 67 submissions fell consistently over the period 2008-2012.
- The number of co-operation partners explicitly stated as providers of direct technical assistance fluctuated from 2008-2011 and dropped sharply in 2012.
- Of the 8 LDC WTO members that have so far submitted needs communications to the WTO TRIPS Council, it is not evident that there has been a marked increase in the number of activities or the scope of the individual technical assistance activities reported.

Of the 33 LDC WTO members, 25 were reported in Art. 67 submissions in 2008 as being direct beneficiaries of technical assistance. This number steadily decreased over the 5 years, with 21 LDC members being reported as direct beneficiaries of technical assistance in 2009, 18 in 2010, 16 in 2011 and only 8 countries in 2012¹⁷⁵, as shown in figure 3.

Figure 3. Number of LDC members reported as direct beneficiaries of assistance



8 LDC WTO members were reported as direct beneficiaries of technical assistance in only 1 year of the 2008-2012 period.¹⁷⁶ Benin, Chad and Haiti were reported as not being direct beneficiaries of any technical assistance activities over the period. 5 LDC WTO members were explicitly reported as direct beneficiaries of technical assistance over the entire 5 year period, namely, Bangladesh, Cambodia, DR Congo, Tanzania and Uganda. A further 7 LDC members received assistance in 4 of the 5 years¹⁷⁷, with another 7 LDC members receiving assistance in 3 of the years in the 2008-2012 period.¹⁷⁸

Cambodia was reported most frequently as a direct beneficiary of technical assistance, with 25 activities reported from 2008-2012. Bangladesh was reported as a direct beneficiary of technical assistance in 14 cases, followed by Uganda (11 cases) and DR Congo (9 cases). Senegal, Tanzania and Zambia were reported as direct beneficiaries of technical assistance

¹⁷⁵ Bangladesh, Burkina Faso, Cambodia, DR Congo, Gambia, Tanzania, Uganda, and Vanuatu.

¹⁷⁶ Central African Republic, Djibouti, Guinea, Guinea Bissau, Mauritania, Niger, Sierra Leone, and Togo.

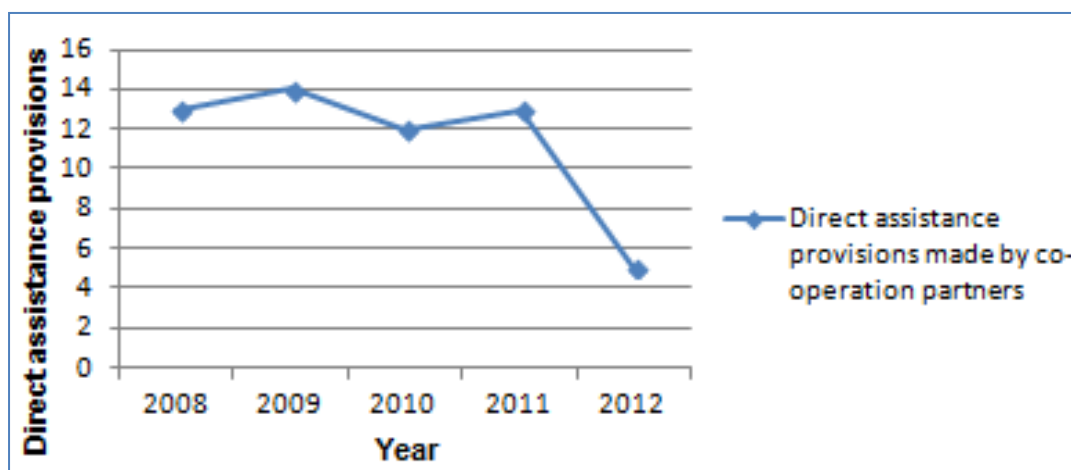
¹⁷⁷ Angola, Burkina Faso, Gambia, Mali, Nepal, Rwanda, and Vanuatu.

¹⁷⁸ Burundi, Lesotho, Madagascar, Malawi, Mozambique, Senegal and Zambia.

in 8 cases, and Angola, Mali, Mozambique, Myanmar and Nepal were reported as direct beneficiaries of technical assistance in 7 cases.

The number of co-operation partners (developed countries and international organisations) that reported provision of direct assistance to LDC members fluctuated considerably over the period 2008-2011 (see Figure 4). The number decreased rapidly from 2011 to 2012 with only 5 co-operation partners¹⁷⁹ reporting provision of direct assistance to LDC members. Interestingly, none of these 5 were international organisations.

Figure 4. Number of co-operation partners providing assistance to LDC members



From 2008-2012, WIPO reported the greatest total number of cases (23) where it had provided direct assistance to LDC members, followed by the EU (15 cases), United States of America (13 cases), Canada (9 cases) and UPOV (8 cases).¹⁸⁰ Several LDC members (eg Bangladesh, Cambodia, Lesotho, Malawi, Mali, Rwanda) were reported as direct beneficiaries of assistance from the same development partner consistently over a number of years in the period.

Of the 8 LDC members that have submitted needs communications to the WTO TRIPS Council to date, all were explicitly reported as direct beneficiaries of at least one case of direct technical assistance over the period 2008 to 2012. Of the 5 LDC members who were reported as direct beneficiaries of technical assistance in all years from 2008 to 2012, 3 had submitted needs communications (Uganda in 2007, Tanzania and Bangladesh in 2010). However, it is not evident that there has been a marked increase in the number of activities or the scope of the individual technical assistance activities reported subsequent to the needs communications submissions by each of the respective LDC WTO members.

Interestingly, Sierra Leone and Uganda, both of whom submitted needs assessments in 2007 and follow-up communications in 2008 have had very different experiences. Uganda has been reported as a frequent direct beneficiary of technical assistance (11 cases between 2008 and 2012). Conversely, Sierra Leone is reported as being a direct beneficiary of technical assistance in just one case (WIPO in 2010).

Text box 4. Key aspects of sequencing of implementation of LDC national IP programmes.

The following aspects are considered key in sequencing the implementation of an LDC's national IP programme:

An initial heavy emphasis on building the capacity of relevant Government agencies to take the lead in co-ordinating, implementing and monitoring projects and activities within the programme and the linkages to related Government policies and programmes.

¹⁷⁹ Australia, Belgium, Canada, Japan, and Switzerland

¹⁸⁰ Of the 25 direct beneficiaries, WIPO reported providing assistance to 17 in 2008 alone.

A medium-term, strategic common planning framework, with a gradual, patient level of sustained activity supported by the Government and its development partners over the programme period rather than a series of ad hoc events, peaks, troughs and interruptions.

A strong development focus to the programme, emphasising the need to involve a broad range of stakeholders from across government, the private sector and civil society and to gain their support for the protection of IPRs in the country by raising awareness and demonstrably contributing to national social and economic goals, building a sound and viable technological base and meeting international obligations.

Harmonised, predictable and transparent arrangements for programme funding, management and co-ordination by development partners, with emphasis on upgrading and utilising the Government's own public financial and procurement systems as far as possible.

Mechanisms for regular multi-partner joint reporting, review and evaluation of a common set of expected results, impacts and outcomes, as opposed to multiple discrete systems which place a heavy and unnecessary burden on the lead government agencies¹⁸¹.

5.2 Bilateral programmes – European Union

This section describes bilateral and regional programmes for technical and financial assistance by the European Union and certain of its individual member states benefitting LDCs, but only where there is significant information available. In addition to the activities of the European Commission, individual EU Member States have reported to the WTO on their national activities for the benefit of LDCs and a number of these are considered in turn below. The analysis is not intended to be exhaustive nor representative of the technical and financial assistance that the European Union has provided, and it does not include assistance provided to non-LDC members.¹⁸²

European Union

Like all development cooperation, the European Union's IP-related programmes are designed in response to the national and regional strategies of partner countries. Programmes can focus on TRIPS implementation (including advising on flexibilities under the agreement), assistance to national IP institutions and administration, and awareness-raising campaigns for potential rights holders. The EU has a number of channels through which IP-related technical and financial cooperation can be provided.¹⁸³

- For the 79 African, Caribbean and Pacific (ACP) countries, the European Development Fund (EDF) 10 (2008-2013) is ongoing and EDF XI (2014-2020) is currently under negotiation. LDCs from the ACP are invited to indicate their demand for assistance related to IP issues. The EDF X has national, regional and ACP-wide windows.
- LDCs outside of the ACP group (for example in South or South East Asia) can receive support from the Development Assistance Instrument (DAI), which again has national and regional windows.
- Three specific EU-funded programmes at the ACP-wide level- TradeCom, BizClim and ACP Multilateral Trading System (MTS) programme – have been used to meet requests for IP-related assistance for LDCs from ACP countries. A number of recent programmes have been carried out with LDC members as well as regional organisations.
- Funding for regional cooperation and economic integration in the context of the EU-ACP Economic Partnership Agreements can include assistance for IP issues. For

¹⁸¹ Identifying Priority Needs for Technical and Financial Cooperation to Implement the TRIPS Agreement, A Guidebook for LDCs, WTO, Forthcoming.

¹⁸² For example, Spain reports that its bilateral cooperation with developing countries on IP-related issues is focused on Latin American countries, and does not include LDCs to date.

¹⁸³ Delegation of the European Union, Art 67 submission, 2012

example, there is ongoing discussion around technical assistance to the EAC through the EPA framework.

- The EU has signed an MOU with ARIPO to provide technical assistance in law drafting, training and capacity building in the areas of GIs and plant variety protection.

In many cases, individual cooperation projects within EDF and DAI assistance frameworks have been delivered by international organisations. For example, the DAI instrument was used to finance a project delivered by WIPO for Bangladesh on modernising and administering the national IP system to meet Bangladesh's development objectives (2008 – 2011). In the past, the European Patent Office has played a significant role in delivering EU-funded technical co-operation for developing countries, often contributing co-finance to projects, and sometimes in collaboration with national IP offices of countries within the European Patent Organisation.

Finland

The National Board of Patents and Registration of Finland (PRH) provides capacity building to IP officials as well as state-of-the art search reports to several LDCs. In 2010, PRH held a training course on copyrights which included a participant from Tanzania. PRH held similar courses in 2006 and 2002 and these included participants from the Gambia, Malawi, Zambia and Nepal.

France

Through various national ministries and government agencies, France has provided a large number of training and twinning missions for officials from a number of LDCs. In 2011-2012, most of the training courses were bilateral programmes with non-LDC developing countries, but also included several courses for OAPI officials, a study visit on counterfeiting for Cambodian officials, and intensive training courses organised by the French Industrial Property Institute (INPI) and WIPO. In previous years, INPI has organised similar courses on trademarks and industrial design law, supported regional regulatory frameworks and provided field expertise for OAPI and hosted a seminar on IP issues around SME competitiveness.

Germany

Germany has provided support to LDCs on IP-related issues, with the main recent contribution being the support to the EAC Secretariat on the pharmaceutical sector. In 2008, the German Patent Office (DPMA) hosted an inter-regional seminar on Germany's patent examination system and organized a field visit for OAPI officials to the Federal Patent Court. Previously, Germany also hosted an e-learning course on the 'Flexibilities of the TRIPS Agreement' and provided short-term experts to Cambodia from DPMA.

Italy

Italy's main reported contribution to the European Union's IP-related technical co-operation for LDCs has been through the financing of scholarships for the Masters of Laws in Intellectual Properties offered by the University of Turin from 2003 to 2007. LDC participants have included Rwanda, Nepal, Cambodia and Myanmar.

Portugal

Portugal provides IP-related technical assistance to Portuguese-speaking developing countries (including LDC-members Angola, Guinea-Bissau and Mozambique). In 2011, the Portuguese Industrial Property Office (INPI PT) held an IP seminar in Macau and worked with the Africa Bureau of WIPO on cooperation with Portuguese-speaking African countries on coordinating technical assistance missions, including a two-week training course on patents, trademarks and documentation held in Portugal.¹⁸⁴

International cooperation on IP-related issues in previous years has included:

- Hosting a meeting with Portuguese-speaking countries on implementing a common trademark system in 2009.
- Participation from Angolan IP officials in an intensive two-week course on patents, trademarks and information/documentation in 2009.
- Forum on IP for Lusophone countries which included the establishment of an action plan in 2008.
- Launch of Lusophone Portal in 2007, a virtual forum all the Portuguese speaking countries and the main IOs in the field of industrial property and makes available, online and free of charge, the largest collection of patent documents in Portuguese language.
- Ministerial conference on IP for Portuguese-speaking countries to develop strategies to promote cooperation in the field of IP.

Sweden

In 2011 and 2012, the Swedish Patent and Registration Office (PRV), funded by SIDA and in cooperation with WIPO, has held several training courses for developing countries on IP and economic development. These training courses included over 25 LDC participants from Ethiopia, Bhutan, Bangladesh, Lao PDR, Cambodia, Sudan, Nepal, Uganda, Zambia, Burkina Faso, Burundi, Rwanda, Tanzania and Mozambique.¹⁸⁵ The Swedish patent office has held similar courses for LDC officials over the last decade, on topics from bio-safety and bio policy, copyright administration and industrial property information.

PRV holds three annual international training programmes financed by SIDA for which LDC officials can apply through the PRV website. These three programmes are:

- Copyright and related rights in the global economy.
- Intellectual property rights for LDCs.
- Industrial property rights in the global economy.

In addition, PRV offers the possibility of tailor-made training courses for topics not covered in these regular courses.¹⁸⁶

United Kingdom

The UK Intellectual Property Office (UKIPO) undertakes research on IP priorities of developing countries, including most recently a study on technology transfer incentives and an assessment of impact of technical assistance on IP related issues. A joint UKIPO- United

¹⁸⁴ Delegation of the European Union, Art 67 Submission, 2012

¹⁸⁵ Delegation of the European Union, Art 67 Submission, 2012

¹⁸⁶ Swedish Patent and Registration Office (PRV), 2013

States Patent and Trademark Office USPO conference in raising awareness of counterfeits and pirated products in the digital environment for Africa and China was undertaken in 2009.

In addition, the UK Department for International Development (DFID) and ICTSD have a £2.5 million Strategic Framework Agreement which aims to support IP policy design and formulation and enhance technology transfer in developing countries.¹⁸⁷ Prior to this agreement, DFID supported an IP technical assistance project in Sierra Leone, and provided financial support for the development of the ICSTD-Saana Consulting Needs Assessment Toolkit, including pilot projects in Sierra Leone and Uganda.

The UK-funded Light Years IP (LYIP) programme provides assistance to producers, exporters and governments to identify the value of intangibles and in turn analyse the export potential of goods and services. Since 2004, LYIP has conducted over 30 training courses and workshops across Africa for the producers of distinctive products, ranging from tea, honey, artistic work and cultural brands.¹⁸⁸

5.3 Bilateral programmes – other WTO member countries

This section describes bilateral programmes for technical and financial assistance by WTO member countries outside of the European Union where there is significant information available. The analysis is not exhaustive in terms of co-operation partners or activities.

Australia

Australia's involvement in IP technical and financial assistance has largely focused on the Asia-Pacific region, though the Government has recently announced the extension of its activities to Africa through cooperation with WIPO and ARIPO. In 2012, Australia signed a MOU with WIPO outlining the requested activities under its Funds-in-Trust, including support to the development of IP needs communications and the implementation of national IP strategies, assistance to LDCs in acceding and implementing WIPO treaties, and providing experts to work with IP offices on issues from human resources to IP automation. Australia also supports WIPO in funding training and workshops, as well as the Queensland University of Technology/WIPO Academy Masters of IP Law course.

In 2012, Australia signed a MOU with ARIPO on Industrial Property Cooperation. The MOU aims to build IP examiner capacity and facilitate the provision and exchange of information relating to IP training and quality standards.¹⁸⁹

Furthermore, Australia is developing an ongoing regional patent training programme to be delivered under the auspices of the Australian and New Zealand Free Trade Agreement and Environmental Change and Security Project (AANZFTA ECSP). The programme is expected to enhance patent examination standards in participating offices, and will provide in-depth patent examination training based on IP Australia's existing competency-based programme. For 2013, only Malaysia, Indonesia, and the Philippines are participating in the 2-year programme, but it is also open for ARIPO countries, through financial assistance of WIPO. For 2013-14, Australia contributed around \$1.3 million.

Previous support on IP-related issues has included support to Pacific countries on establishing a regional system for processing trademark applications, targeted capacity building programmes in cooperation with WIPO and broader financial support to the WTO Global Trust Fund.

¹⁸⁷ Swedish Patent and Registration Office (PRV), 2013

¹⁸⁸ Ghafele, R & Engel, J, *Intellectual Property Related Development Aid: Is supply aligned with demand?*, 2011

¹⁸⁹ Delegation of Australia to the WTO, Art 67 Submission, 2012

Canada

Canadian cooperation on IP-related issues is channelled through the Canadian International Development Agency (CIDA), Canadian Intellectual Property Office (CIPO), the International Development Research Centre, as well as several other government bodies for specific thematic areas (e.g. Health Canada for IP issues related to pharmaceuticals). CIDA runs or contributes to a number of programmes in LDCs which promote good governance and legal reform more broadly, for example the Legal Reform Programme in Bangladesh and the Democratic Institutions Programme in Ethiopia.

CIDA also contributes to a number of regional programmes in Africa, including several trade capacity building programmes run by the International Trade Centre (ITC) and United Nations Economic Commission for Africa (UNECA). CIPO provides an annual training course for nationals from across the developing world, and a delegate from Ethiopia participated in 2012. The office also supplies state-of-the-art searches and examination reports as requested by developing countries through WIPO. The IDRC conducts research on IP-related issues in developing countries and has a number of programmes which seek to provide technical assistance to developing countries, and those specific to LDCs include the following:

- Improving the Integration of Young African Researchers into Research and Innovation Systems (Burkina Faso, Cameroon, Senegal).
- Accessing Patented Knowledge for Innovation (Cameroon, China, Brazil, India, Philippines, Botswana, Tanzania)
- Fair Access to and Benefit Sharing of Genetic Resources: National Policy Development (China, Jordan, Nepal, Peru)
- African Copyright and Access to Knowledge Network (ACA2K) (Egypt, Ghana, Senegal, South Africa and Uganda)

CIPO and Health Canada have engaged in similar cooperation in previous years as well, including LDC participation in the annual CIPO-WIPO Executive Workshops in Canada. Canada has also committed CAD 2.5 million over the period 2009 – 2014 to the WTO DDGATF, which finances inter alia assistance related to the TRIPS Agreement for LDCs.

Canada encourages its LDC priority countries for development co-operation generally (Bangladesh, Tanzania and Senegal) to pursue any requests for support in IPRs through official channels set up by CIDA for priority countries of focus. Non-priority countries are encouraged to address requests for assistance to the relevant CIDA bilateral country programme where applicable.¹⁹⁰

Japan

Japan channels its official IP-related assistance for LDCs through three trust funds administered by intergovernmental agencies (WIPO and WCO) as well as technical cooperation through its development agency, Japan International Cooperation Agency (JICA).¹⁹¹ The WIPO Fund-in-Trust/Japan provides assistance in the industrial property area for developing countries in the Asia and Pacific region.¹⁹² The Fund provides for both

¹⁹⁰ Delegation of Canada to the WTO, Art 67 Submission, 2012

¹⁹¹ To avoid double counting, technical assistance activities for LDC WTO members supported by contributions to Trust Funds at WIPO and WCO by Japan and other WTO members are treated in this study as activities of WIPO and WCO. Data on these activities used in this report is therefore taken from reports provided to WTO TRIPS Council by WIPO and WCO, rather than the WTO member state making the financial contribution to the respective trust fund.

¹⁹² For more information, see Delegation of Japan, Complementary report on technical cooperation activities for LDCs: IP/C/W/572

technical and financial assistance, for example in advising and procuring equipment for digitisation of copyright records and long-term fellowships for government officials and IP professionals. This fund has provided assistance to Nepal, Bhutan, Cambodia, Lao and Myanmar.

The second WIPO fund which receives contributions from Japan is the WIPO Development Cooperation Programme for Africa & LDCs and Japan's involvement again is in the industrial property field. At the 2012 symposium, Japan stated that all its support to African countries for IP-related technical co-operation will be channelled through WIPO, given the lack of expertise and physical distance between Japan and Africa.

The third trust fund is the WCO Customs Cooperation Fund which Japan provides financing for technical assistance and capacity building activities.¹⁹³ Further, JICA hosts IP training programmes for foreign government officials, including the:

- WIPO High-Level Forum on Global Intellectual Property Infrastructure for Promotion of Innovation which include 100 senior officials from 50 IP offices worldwide in 2010.
- WIPO Study Programme on Effective Development and Utilisation of IP Assets which hosted 12 participants from 8 Asian and Pacific and 4 African countries in 2009.

New Zealand

New Zealand has undertaken technical cooperation activities at the multilateral, regional and bilateral levels. At the regional level, New Zealand participates in the Asia-Pacific Economic Cooperation Intellectual Property Rights Expert's Group (APEC-IPEG), which provides a forum for sharing information and best practices on IPR. New Zealand also participates in the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA) IP Committee, which provides an avenue for regular discussions on a range of IP topics of mutual interest to the participants.

The primary New Zealand Government agencies that are involved in IP technical cooperation activities are the Ministry of Business, Innovation and Employment (MBIE), the Intellectual Property Office of New Zealand (IPONZ), and the Ministry of Foreign Affairs and Trade (MFAT). New Zealand also provides technical assistance to members of the East Asia Plant Variety Protection Forum.¹⁹⁴

In the past, New Zealand has provided technical assistance on IP-related issues in the Asia Pacific region. In 2010, IPONZ hosted a Senior Intellectual Property Officer from the Samoan Ministry of Commerce for a one-year period to provide training on the examination and processing of intellectual property rights. IPONZ has also provided support to the Secretariat of the Pacific Community on IP-related legislation and welcomes requests for technical assistance from LDCs.

Norway

Since 2000, the Norwegian Industrial Property Office, in collaboration with the WIPO Academy, organises an annual training course for up to 20 participants from partner organisations in developing and least developed countries.¹⁹⁵ In addition, Norway's bilateral development cooperation with Bangladesh has included a component on supporting local musicians protect their IPR.¹⁹⁶

¹⁹³ Delegation of Japan to the WTO, Art 67 Submission, 2012: IP/C/W/572

¹⁹⁴ Delegation of New Zealand to the WTO, Art 67 Submission, 2012

¹⁹⁵ Delegation of Norway to the WTO, Art 67 Submission, 2012

¹⁹⁶ Delegation of Norway to the WTO, Art 67 Submission, 2012

Switzerland

The Swiss Federal Institute of Intellectual Property works directly with WIPO and runs bilateral programmes with several developing countries, including most recently, two LDCs. In 2011, the institute provided experts to lecturers for several courses and provided free-of-charge patent searches for developing countries at the request of WIPO. In 2011, the Institute also implemented the Swiss-Lao Intellectual Property Project (LIPP) which organised two missions for Laotian IP policy makers and funded their participation in an IP summer programme.

In 2013, the Institute will launch the Bangladeshi-Swiss Intellectual Property Project (BSIP). This programme will provide support in a number of areas, including the development of a legal framework for traditional knowledge, traditional cultural expressions, geographical indications and modernisation of the IP system, in response to the needs communication submitted by Bangladesh to the WTO TRIPS Council in March 2010.¹⁹⁷

In past years, the Swiss IPI has provided support and expertise to a number of regional workshops on IP, including the joint OAPI-WIPO workshops held in Geneva.

United States of America

The US provides IPR technical assistance through a number of government ministries and agencies, including the US Copyright Office, US Trade Representative, US Trade and Development Agency, United States Agency for International Development (USAID) and the Departments of State, Commerce, Justice and Homeland Security. LDCs requests for assistance can address any area including training and capacity building, automation of the IP system (here the US reported at the 2012 symposium that it is favouring regional offices that deal with large numbers of applications for patents, trademarks, design etc. instead of national offices), legal drafting, and the use of IP as a development tool.

At the 2012 symposium, the US indicated that it does not support requests for technical or financial assistance in such areas like the protection of traditional knowledge or genetic resources. Examples of recent programmes which include participation from LDCs have included:¹⁹⁸

- Workshop for Malian Customs to Prevent the Entry of Counterfeit Goods Seminar on Fighting Counterfeiting and Piracy (Burkina Faso, Nigeria and Togo)
- Geographical Indications: Providing Protection through a Trademark System (West Africa)
- IPR Policy Dialogue and Technical Workshop (Nepal)
- Workshop on Trademark Examination (Cambodia and Nepal)
- Regional Roundtable - Advanced Judicial Seminar on IP Enforcement (included Cambodia and Lao PDR)

Similarly, in previous years the US has organised numerous workshops, training courses and study tours on TRIPS, IP enforcement, trademark examination, plant variety protection and other IP-related issues for policymakers, judges and other officials from developing countries and LDCs. A few illustrative examples include:

- A workshop for 150 customs officials and prosecutors from French-speaking West Africa on 'at the border implementation' of IPR in 2010.

¹⁹⁷ Delegation of Switzerland to the WTO, Art 67 Submission, 2012

¹⁹⁸ Delegation of the United States to the WTO, Art 67 Submission, 2012

- USPTO-WIPO 5-day programme on the enforcement of IP in 2009.
- Enforcement workshop on combating counterfeiting within the Southern African Development Community (SADC) in 2008.
- Two-year training programme for ASEAN customs and border officials focused on building IPR enforcement units in 2007.
- Visiting scholars programme for government officials for an overview of the US patent and trademark examination system in 2006.

South-South programmes

There is an increasing awareness among policymakers of the importance of South-South cooperation and experience-sharing on IP-related issues. In August 2012, WIPO and the Government of Brazil organised the First Inter-Regional Meeting on South-South Cooperation on IP as part of the WIPO project on 'Enhancing South-South Cooperation'. The meeting focused on experience-sharing and exploring and identifying areas for increased cooperation in traditional and local knowledge and will be followed up by the second meeting planned for Egypt in spring 2013 which will focus on patents, trademarks, industrial designs, geographical indications, and enforcement. WIPO also launched the First Annual Conference on South-South Cooperation on IP and Development in Geneva in September 2012 to review the outcomes of the Brazil meeting and help guide future meetings.¹⁹⁹

Considering more concrete cooperation activities, there have been some recent cooperation programmes involving developing countries assisting LDCs, though these programmes still appear to be few in number. The Brazilian Cooperation Agency, for example, has worked closely with the Mozambican Drug Regulatory Authority to build regulatory capacity.²⁰⁰

The Korean Intellectual Property Office (KIPO)-Korean Invention Promotion Association (KIPA) 'One Village One Brand'-project was established to facilitate sustainable economic growth in LDCs and developing countries, worldwide. KIPO-KIPA is working with developing countries and LDCs to develop their brands and market strategies to establish effective protection of their brands through the use of IPR tools. This should contribute to an increase in export revenues, ultimately leading to improvements in standard of living.

Once a country or community is selected, an IP professional and branding expert is dispatched to assist in the development of brands and products, formulate market strategies, and provide seminars and other educational materials to fully equip the LDCs with the knowledge and capacity to obtain the maximum benefit from their products.

5.4 International organisations

African Regional Intellectual Property Office

Each year, ARIPO offers numerous training courses on a variety of topics from plant variety protection, to trademark legislation and enforcement and technology transfer. ARIPO, in partnership with the Africa University and WIPO, with financing from JICA, has offered the Masters in Intellectual Property (MIP) programme since 2007.

¹⁹⁹ WIPO, First Annual Conference on South-South Collaboration on Intellectual Property and Development, 2012

²⁰⁰ Ghafele, R & Englel, J, *Intellectual Property Related Development Aid: Is supply aligned with demand?*, 2011

European Patent Office

The European Patent Office (EPO) supports developing countries with conferences, study visits and expert assistance on a number of IP-related issues, from legislation and legal procedure to modernisation of IP systems. In 2011 and 2012, EPO organised a number of regional conferences for the ASEAN region, which includes several LDCs. However, there appears to have been little technical co-operation by the EPO with African LDCs on IP-related issues.²⁰¹ In previous years, EPO has organised a number of expert missions and training courses for Cambodian officials (including through ECAP II).

Food & Agricultural Organisation

According to the 2012 submission to the TRIPS Council, the FAO does not have any on-going activities related to IPR in LDCs. In 2009, the FAO concluded a training programme in Bangladesh on the formulation of enabling regulatory measures for biotechnology research and application.

From 2008 to 2010, the FAO provided assistance in drafting of legislation of plant variety rights to Madagascar.²⁰² In 2001, FAO organised several workshops in Africa to promote awareness and support in implementation. Also, the FAO has published several papers on IPR and food production, plant varieties and genetic resources over the last decade.

Organisation for Economic Cooperation and Development

The Organisation for Economic Cooperation and Development (OECD) carries out research and policy dialogue on a number of aspects related to IPR in LDCs. The 2010 Innovation Strategy report resulted in a number of follow-up activities, including work on identifying best practices of national IPR systems in supporting development objectives in low and middle-income countries.

The OECD also has on-going research on IPR and the environment which considers technology transfer and other issues pertinent to the TRIPS Agreement, and is working with WIPO and other national organisations on the development of a patent statistics database.²⁰³

Organisation Africaine Propriété Intellectuelle

OAPI, often in partnership with WIPO and INPI, provides training courses and workshops across the region on IP and development related issues.

Furthermore, OAPI has a fund for supporting innovation among researchers and the private sector. The USD 2 million (FCFA 1 billion) Fund for the Promotion of Invention and Innovation (FAPI) provides debt, grant and equity financing for eligible SMEs and inventors to encourage innovation and patent protection of these innovations.²⁰⁴

²⁰¹ Delegation of the European Union, Art 67 Submission, 2012

²⁰² FAO, 2012: <http://www.fao.org/docrep/003/x7355e/x7355e08.htm>

²⁰³ OECD, Art 67 Submission, 2012

²⁰⁴ Interview with Director General of the African Intellectual Property Organisation: http://www.wipo.int/sme/en/documents/oapi_interview.htm

United Nations Conference on Trade and Development

UNCTAD's cooperation with LDCs on IP related cooperation is guided broadly by the Development Dimension of Intellectual Property (DDIP) programme which provides needs communications, technical advice and training and capacity building.²⁰⁵

Upon request by a developing or least developed country, UNCTAD is producing DDIP reports which examine the country's policy, legal and institutional framework for IPRs and based on this analysis, present a set of medium to long-term recommendations on ways to strengthen these frameworks, and promote innovation and technology transfer from abroad, as well as a pro-competitive and transparent domestic IP system.

Examples of recent areas of support through the DDIP framework include access to medicine and technology transfer (Uganda), IP policy development and implementation strategy formulation (Rwanda) and copyright protection (Cambodia). Through this programme, UNCTAD has also published reference guides for LDC policymakers on issues such as stimulating local pharmaceutical production, and held training courses to provide further support on these issues.²⁰⁶ In 2010, UNCTAD provided support for preparing Rwanda's communication of priority needs for technical and financial cooperation for submission to the WTO TRIPS Council (see Section 4).

Previously, The UNCTAD-ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development provided research tools and publications aimed at improving the understanding of the development implications of the TRIPS Agreement and strengthening the analytical and negotiating capacity of developing countries so that they are better able to participate in IPR-related negotiations.

In 2008 and 2009, UNCTAD held training courses for ASEAN and African government officials, respectively, with the aim of familiarising participants with the tools available under the TRIPS Agreement to better align their IP regimes with national health objectives. In 2007, UNCTAD also assisted several developing countries (including Tanzania) in the preparation of country reports on the national IP and investment regimes of selected developing countries, which include detailed policy recommendations to facilitate the establishment of local pharmaceutical production and supply capacity.

International Union for the Protection of New Varieties of Plants

The main objectives of International Union for the Protection of New Varieties of Plants (UPOV) are, in accordance with the UPOV Convention, to: i) provide and develop the legal, administrative and technical basis for international cooperation in plant variety protection; ii) assist States and organisations in the development of legislation and the implementation of an effective plant variety protection system; and iii) enhance public awareness and understanding of the UPOV system of plant variety protection.²⁰⁷

UPOV's work with LDCs is mostly through national and regional awareness building and informational workshops on plant variety protection through legislation and enforcement and setting up the relevant institutional infrastructure. These seminars seek to create awareness of the economic potential in developing national and regional legislation for the protection of new varieties of plants, share experiences with countries that have established plant variety protection systems, and carry out an explanatory assessment of the status of plant variety protection systems. UPOV also organises distance-learning courses on similar issues for

²⁰⁵ UCTAD, Art 67 Submission, 2012

²⁰⁶ UNCTAD, Art 67 Submission, 2012

²⁰⁷ UPOV, Art 67 Submission, 2012

developing countries, including several introductory courses on plant variety protection under the UPOC convention.

In 2010 and 2011, UPOV organised a number of training workshops on plant variety protection for LDCs, including a distance learning introductory course to the UPOV Convention. In addition, UPOV provided comments in drafting of laws associated with the 1991 UPOV convention to a number of LDCs, including Cambodia, Tanzania and Zambia, as well as ARIPO.²⁰⁸

As of December 2012, 10 of the 34 LDC WTO members were represented in the UPOV Council as official observers.²⁰⁹

South Centre

The South Centre is an intergovernmental organisation comprising 52 developing countries, including a number of LDCs. Based in Geneva, it was established to provide policy advice to developing countries and to contribute to south-wide collaboration in promoting common interests and coordinated participation by developing countries in international forums dealing with South–South and North–South matters. The South Centre undertakes research and policy analysis; policy advice; and capacity-building and training. The Centre's programme on Innovation and Access to Knowledge deals with a range of intellectual property issues, such as IP, innovation and access to pharmaceutical products, including providing training in this area. The South Centre provides policy advice in order to meet its objective of assisting developing country governments in decision-making with respect to standard-setting and rule-making, for instance in relation to IP and access to pharmaceutical products. The Centre also provides analysis of the main international treaties and ongoing international negotiations relating to intellectual property issues.

World Bank

Over the last decade, the World Bank has published a number of research papers examining IP issues related to developing and least developed countries. Most recently, in 2010, the Bank published a 400-page guidebook for innovation policy, which included a significant focus on IPR for emerging developing countries and LDCs.

In 2012, the World Bank published research looking at different IP monetisation strategies in developing countries, though the focus was on more advanced, emerging economies rather than LDCs.

World Customs Organisation

The WCO undertakes technical cooperation and capacity building in support of anti-counterfeiting and anti-smuggling. The 'Information Repository of Legislation on Border Measures for Counterfeiting and Piracy' provides among other things, a list of current IP legislation for border measures and contact points for the relevant customs units and the private sector. The WCO is engaged in expanding the use of the Interface Public-Members (IMP) tool to strengthen the operational capacity of customs officers via improved communications between customs bodies and IP rights holders (currently 44 member administrations are using the tool, although the number of LDCs is not specified).

In 2011 and 2012, the WCO held a number of national and regional training seminars as well as diagnostic missions and operational exercises which included a number of LDCs. In

²⁰⁸ UPOV, Art 67 Submission, 2012

²⁰⁹ UPOV, Art 67 Submission, 2012

July 2012, the “Operation VICE GRIPS 2” included 16 countries from across Sub-Saharan Africa. The WCO maintains a pool of accredited anti-counterfeiting and piracy experts available to support in training and capacity building.²¹⁰ Since 2009, the WCO has conducted diagnostic missions to several LDCs, including Burkina Faso (2011), Cambodia (2009) and Senegal (2009).

World Health Organisation

The ‘Global strategy and plan of action on public health, innovation and intellectual property’ was adopted by the World Health Assembly in 2008. This resolution set up an expert working group, which recommended further action, and funding (including setting up pooled funds and a more open approach) to innovation and R&D. The 2012 Assembly presented a prototype of a Global Platform for Innovation and Access which would support the standardisation of information across member states to better understand the IP frameworks from a public health perspective.²¹¹

In conjunction with UNCTAD and ICTSD, the WHO is leading a EU-funded project on local production of medical products in developing countries. This project includes country-based analysis tools, training and capacity building for both government regulators and local producers. At the regional level, WHO offices carried out a number of workshops in 2012, including a workshop on traditional medicine research and development which included sharing of country experiences on IPR by the WHO Africa regional office and several workshops by the SEA regional office which included IPR and TRIPS aspects. Through its regional and country offices, the WHO can provide, upon request, direct country support in policy making and management of IP, including on patent legislation and incorporating TRIPS flexibilities with domestic legislation.²¹²

In previous years, WHO has held regional workshops on IPR-related health and healthcare issues in Asia, the Pacific and Africa, through its regional country offices and partners such as United Nations Development Programme (UNDP), the Economic Community of West African States (ECOWAS), SADC and the University of Cape Town. Specific topics have included legislation to facilitate access to essential medicines, stimulating local production of pharmaceuticals and the development and health aspects of the TRIPS Agreement.

World Intellectual Property Organisation

WIPO supports LDCs in developing and implementing strategies and policies aimed at creating, protecting, managing and exploiting IP for economic, social and cultural development. WIPO has strengthened its assistance to help countries in integrating IP into overall national development and public policy in areas such as health, trade, education, research, technology transfer and competition policies, including advising countries on the flexibilities available under international IP treaties, and in particular the TRIPS Agreement.²¹³

The WIPO Development Agenda, launched in 2007, aims to ensure that development considerations form an integral part of WIPO’s work. The Agenda is focused around 45 recommendations to enhance the development dimension of the Organisation’s activities. The recommendations are divided into six clusters:

- Cluster A: Technical assistance and capacity building.

²¹⁰ WCO, Art 67 Submission, 2012

²¹¹ WTO, Technical Cooperation Activities: Information from other Inter governmental organisations , WHO, 2012

²¹² WHO, Art 67 Submission, 2012

²¹³ WIPO, World Intellectual Property Report : The changing face of innovation, 2011

- Cluster B: Norm-setting, flexibilities, public policy and public domain.
- Cluster C: Technology transfer, information and communication technologies (ICT) and access to knowledge.
- Cluster D: Assessment, evaluation and impact studies.
- Cluster E: Institutional matters including mandate and governance.
- Cluster F: Other Issues.

In addition to the adoption of the WIPO Development Agenda, Member States also approved a recommendation to establish a Committee on Development and Intellectual Property (CDIP).²¹⁴

The 2011 Istanbul Declaration and Programme of Action for LDCs for 2011-2020 and the WIPO Development Agenda guide financial and technical cooperation. WIPO activities are demand-driven and can be financed whether through its own resources or through cooperative agreements with other organisations and co-operation partners. WIPO activities with LDCs include the following (see Text box 1 for case studies of activities in Uganda and Cambodia in 2012):²¹⁵

- Training in awareness-building and human resources development for IP officials in LDCs.
- Assistance in building up or upgrading IP offices in LDCs with adequate institutional infrastructure and resources, qualified staff, modern management techniques and access to information technology support systems.
- Advisory missions to the IP offices in LDCs to give advice on modernising management systems and streamlining administrative procedures.
- Sponsoring study visits for officials from the LDCs.
- Organising study tours for officials from many LDCs to offices in industrialised countries to study various aspects of modernisation.
- Assisting LDCs on legislation in the areas of industrial property, copyright and neighbouring rights and GIs and enabling LDCs to assess the conformity of their existing national legislation vis-à-vis the provisions of international agreements and build national IP organisations and institutions.
- Advising in the setting-up or strengthening of collective management societies in the LDCs.
- Organising, in close cooperation with other international organisations, national, regional and interregional meetings for the LDCs on integrating IP into national development policy.
- Assisting LDCs in the establishment of Intellectual Property Advisory Services and Information Centre.

Text box 5. Examples of WIPO Activities with LDCs in 2012

WIPO and Uganda

Uganda has been involved in 19 meetings/programmes organised by WIPO on technical assistance over the year 2012. These events were in the fields of IP, development, copyright, innovations and judiciary. Notably, WIPO organised a mission to Uganda for the implementation of the Development Agenda project on IP and product branding for Business Development in Developing and LDCs. This mission consisted of consultations with

²¹⁴ WIPO Development Agenda: <http://www.wipo.int/ip-development/en/agenda/>

²¹⁵ Summary of WIPO Technical Assistance for Least Developed Countries: http://www.wipo.int/lDCs/en/ip/tech_assistance.html

the stakeholders of the cotton, vanilla and sesame sectors on implementing and developing IP strategies in this field, including a discussion on progress and future steps in the implementation of the branding strategies in these strategic sectors.

Furthermore, WIPO organised an IPAS follow-up mission to improve the functionality of IP offices through automation. Uganda also attended meetings and training courses both in the region and globally, including a WIPO training program for Technological Capacity building and the Establishment of the Technology and Innovation Support Centres (TISCs), and meetings with the Regional Bureau For Africa in the fields of IP and development.²¹⁶

WIPO and Cambodia

Cambodia has been involved in 27 programmes organised by WIPO in 2012. WIPO organised a deployment mission on the upgrade of WIPO IPAS systems, to provide users and administrators training on a new version of IPAS and an advisory mission to develop a Collective Management Office in Cambodia. The Ad-Hoc Committee sent out a request for WIPO's further guidance to finalize the draft of articles of association relating to the formation and legal structure of a multi-rights society and other issues related to it.

In addition, Cambodia organised and attended several meetings, for example a meeting on the Establishment of Technology and Innovation Support Centre and Skills Development and Training program, and meetings about the role of innovation and creativity for technological capacity building, Economic growth and Development. Cambodia was also involved in programmes on further improving IP rights in the Global Economy for LDC.²¹⁷

WTO and Enhanced Integrated Framework

The WTO Secretariat works with LDCs on a number of IP-related issues, including through the hosting of seminars and its Guidebook (see relevant sections of Annex A for overview of workshops since 2009 as well as the guidebook). The WTO website provides a variety of technical manuals and important information for LDCs on the various aspects of international agreements related to IP.²¹⁸

The WTO cooperates closely with WIPO on practical capacity building on IP-related issues, including with the annual joint WIPO-WTO Colloquium for Teachers of Intellectual Property, which has provided training to nearly 200 practitioners from both developed and developing countries over the last nine years.²¹⁹

In addition, the Enhanced Integrated Framework (EIF), a multi-donor programme housed at the WTO, which aims to reduce supply-side constraints to trade in LDCs and to support their integration into the global economy, can finance IP-related diagnostics and interventions. The EIF funds trade diagnostics for LDCs, which in some cases include an analysis of IP-related needs. Currently, the EIF has ten to twelve DTIS updates underway, undertaken by international organisations such as the World Bank and UNDP. Several previous DTIS updates, such as Nepal's in 2010, identified a number of areas for intervention related to IP, from ensuring national legislation complies with TRIPS to establishing new IP enforcement mechanisms.

The EIF also funds projects specifically targeted to alleviate supply-side constraints. These Tier 2 projects often focus on specific productive sectors, but can also be targeted towards support to customs or other government agencies. Some examples of assistance that could be provided include:

- Studies, e.g. needs communications or any other/s specific study/analytical work within context of TRIPS negotiations/implementation that would be required.
- Interventions to facilitate country positioning for negotiations.

²¹⁶ World Intellectual Property Organisation: www.wipo.int

²¹⁷ Ibid

²¹⁸ Documentation used in technical cooperation activities of the WTO's Intellectual Property Division: http://www.wto.org/english/tratop_e/trips_e/ta_docs_e.htm

²¹⁹ WIPO-WTO, Colloquium for Teachers of Intellectual Property, 2011

- Workshop and short-term training to raise awareness on TRIPS negotiating/implementation issues, enhancing negotiating/implementation skills.
- Interventions to address regulatory or administrative needs.
- Seed-projects with a view to mobilising additional resources.

Trilateral Cooperation WHO-WIPO-WTO

The trilateral cooperation initiative between the WHO, WIPO and WTO aims to strengthen technical cooperation and practical coordination on issues around public health, IP and trade, with a focus on providing better coordinated technical assistance on issues associated with medical innovation and access to medical technologies. The WHO Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property, the WIPO Development Agenda and the WTO Declaration on the TRIPS Agreement and Public Health provide the broader context for an informal and practical trilateral cooperation at the working level.²²⁰ The trilateral cooperation is intended to contribute to enhancing the empirical and factual information basis for policy makers and supporting them in addressing public health in relation to IP and trade.

As part of the trilateral cooperation, a study on Promoting Access to Medical Technologies and Innovation has been conducted, which intends to inform ongoing technical cooperation activities currently being undertaken by the three organisations, as well as providing support to policy discussions. This study has emerged from the shift in focus of the health policy debate, encompassing the promotion of innovation to ensure equitable access to medical technologies and seeks to reinforce the understanding of the interplay between health, trade and intellectual property, determining how they affect medical innovation and access.²²¹ The study serves as a platform for ongoing technical cooperation, with specific materials on the practical use of more recently introduced TRIPS flexibilities for public health.

5.5 International Non-Governmental Organisations

A number of international NGOs, IGOs and think-tanks have provided IP technical assistance to LDC members in the past (e.g. ICTSD, Oxfam & Médecins Sans Frontières). NGOs engaged in technical assistance activities have tended to focus on ensuring that IPRs do not limit access to medicines and on supporting the negotiation capacity of developing countries and LDCs in international fora such as WTO and WIPO.

International Centre for Trade and Sustainable Development

ICTSD has worked with several LDCs members to conduct their needs communications, and has received funding from the UK Department for International Development for this purpose. Further, under the joint UNCTAD-ICTSD Project on IPRs and Sustainable Development, UNCTAD is producing, upon request by a developing country or least-developed country, a number of reports on the development dimensions of intellectual property. The objective of such a report is to examine developing countries' and LDCs' policy, legal and institutional framework for IPRs, particularly as it relates to important development objectives such as innovation, technology, investment, competition, education and health. In addition, these reports will take into consideration the bilateral, regional and international commitments the target countries have entered into and the flexibilities available to them.

²²⁰ WIPO-WHO-WTO Trilateral Cooperation on Public Health, Intellectual Property and Trade:

http://www.wto.org/english/tratop_e/trips_e/who_wipo_wto_e.htm

²²¹ WHO Public Health, Innovation, Intellectual Property and Trade:
http://www.who.int/phi/implementation/trilateral_cooperation/en/index.html

The ICTSD Programme on Innovation, Technology and Intellectual Property promotes the use and management of knowledge and technology conducive to sustainable development, in the context of balanced and development oriented IP regimes. Programmatic activities focus on facilitating pro-development and pro-competitive outcomes in international trade and IP related negotiations; helping to implement IP norms that balance private rights and public interests; maximising incentives for innovation, creativity and technology transfer to developing countries; and promoting greater integration between IP, technology transfer, foreign direct investment and competition policies.

Light Years IP

Light Years IP is a non-profit organisation dedicated to alleviating poverty by assisting developing country producers gain ownership of their IP and to use the IP to increase their export income and improve the security of that income. Light Years IP assists producers, exporters, and governments in the developing world to analyse their export potential with respect to identifying the value of intangibles and then using IP tools, such as patents, trademarks and licenses, to secure more sustained and higher export income.

Light Years IP has had some successful projects with LDCs. In collaboration with the Ethiopian Government, it designed and managed the Ethiopian Fine Coffee Trademarking and Licensing Initiative. Under the initiative, Ethiopia took a degree of control over the distribution of three of Ethiopia's finest coffees (Yirgacheffe, Harar and Sidamo), through successful trademarking and licensing a large number of distributors (120 licensees to date). This control over distribution radically changed the Ethiopian fine coffee stakeholders' negotiating position so they are no longer subject to commodity market fluctuations or domination by foreign buyers. The much stronger negotiating position led to the published \$100m additional export income in the year to June 2008 and those gains have persisted to the present date.

The African IP Trust (AIPT) was created by Light Years IP to support African stakeholders with Intellectual Property Value Capture strategies and to uphold African IP rights when those rights are exploited. The African IP Trust is to act as a support lobby to assist African farmers and producers receive higher and more secure income.

Public Interest Intellectual Property Advisors

Public Interest Intellectual Property Advisors (PIIPA) was the first provider of pro bono IP legal advisory services to developing countries. It was established as an independent international service and referral organisation that can help fill the need for assistance in developing countries by making the know-how of intellectual property professionals available to them.

PIIPA's main activities include:

- Operating a matchmaking service where assistance seekers can apply to find individual volunteers or teams who can provide advice and representation on IP matters.
- Expanding a worldwide network of IP professional volunteers - the IP Corps - to provide pro bono services.
- Maintaining an online resource centre with information for professionals, students, and those seeking assistance.

Some key services the IP Corps can offer include:

- Negotiation of access and benefit-sharing agreements in relation to genetic resources and associated traditional knowledge.
- Resolution of national, international and multinational disputes involving IP.
- Negotiation of agreements facilitating access to medicines.
- Drafting or review of legislation involving IP protection, e.g. in relation to genetic resources, traditional knowledge, and access to medicines.
- Dispute resolution on matters involving intellectual property rights and indigenous rights.
- Patent application, licensing, challenge and invalidation.

PIIPA works in the following technical areas:

- Agricultural Technology
- Biodiversity/Genetic Resources
- Traditional Knowledge
- Health Care
- Environment
- Information Technology
- Science and Technology