

***Proceedings of the Training Programme on
IPRs and Related WTO Issues***

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Executive Summary

CUTS Centre for International Trade, Economics & Environment (CUTS CITEE)¹ organised a training programme on “Intellectual Property Rights (IPRs) and Related WTO Issues” during May 25-29, 2009, in Jaipur in order to build the capacity of scientists and technologists working with various ministries/departments/councils/institutes/research labs of the Government of India. The Department of Science and Technology, Government of India, supported this training programme to fill the vacuum that exists in terms of absence of adequate institutional base in India to offer training/education on issues related with intellectual property rights and trade, under the aegis of the World Trade Organisation (WTO) Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) and related domestic legislations.

With the introduction of the TRIPs in WTO, IPRs have acquired more significance in day-to-day economic activities. It is imperative for professionals, especially those who are engaged in research and development, to stay abreast of developments in multilateral trading system (MTS) and its framework for enforcing IPRs. Therefore, this training programme has the aim of imparting an overview of the basic principles of MTS enshrined in the WTO and an understanding of the trade rules that apply to IPRs under its TRIPs Agreement. Such a training programme will, hopefully, prepare the scientists and technologists to better exploit the opportunities that arise from the use of IPRs.

A diverse pool of 22 government officials, scientists and technologists and resource persons attended the programme. Over the period of five days, the participants sharpened their skills on various aspects of IPR and related WTO issues through lectures, real life experiences of resource persons, simulation exercises, group discussions, etc. The programme brought experts/resource persons together to explore and deliberate various aspects of IPR and related WTO issues.

The programme was successful in terms of the quality of participation, resource persons, resource materials and administrative and logistical arrangements. It was evident from the responses of the participants that the training programme proved to be an extremely enriching and valuable learning experience, as they handle issues related to patents, copyrights and related WTO issues in their official work. The participants suggested similar training programmes of a longer duration in the future. This report summarises the highlights and main issues discussed during the course of the five-day training programme in a chronological order.

¹ Established in 1996, with the aim of being a high-level global standard institution for research and advocacy on multilateral trade and sustainable development issues. Consumer Unity & Trust Society (CUTS), the parent body, was established 25 years back, as a consumer rights organisation, and has been engaged actively in research and advocacy on policy issues. For more details about CUTS International and CUTS CITEE, please visit our websites: www.cuts-international.org and www.cuts-citee.org.

Opening Session

Atul Kaushik, Adviser (Projects), CUTS, Jaipur

Atul Kaushik inaugurated the training programme and warmly welcomed all the participants. He started by explaining the objective and structure of the programme and highlighted the point that the intention of Department of Science and Technology and CUTS is to provide tailor-made start-up knowledge on various aspects of the IPR and related WTO issues to scientists, technologists and academics engaged in research activities in public sector organisations, so as to enable them to cope with the changing policy framework at both national and international levels. IPRs, with lot of benefits as well as pitfalls, are intangible in nature and are extremely difficult to quantify. Given the macro-economic importance of IPRs and the complexities involved in their valuation and management, it is essential to educate the developers of intellectual properties and keep them informed of the latest advances in IPR law and practice.

Kaushik made it clear that conducting an IPR training programme is immensely challenging, as the topics to be covered are vast. The programme is, therefore, structured in a flexible manner in order to cater to specific requirements of the participants, keeping in mind their diverse backgrounds. He explained that CUTS aims at three significant achievements through the programme. Firstly, resource persons engaged in the programme are leading experts with extensive experience as both researchers and practitioners and, therefore, would be able to accommodate queries cutting across all aspects of IPRs, while handling their respective topics. This would benefit each and every participant in the heterogeneous group with varied demands and expectations. Secondly, the participants would get a clear-cut idea as to where to find the answers to IP related questions they might come across in future. In addition, CUTS, as a research repository, is always accessible for consultancy and guidance. Thirdly, as CUTS is constantly occupied in research and dissemination, interactions with the participants would enrich the organisation's knowledge base and experience. Consequently, long-term mutual benefits through networking and knowledge-sharing would be possible.

Finally, an overview of the history of CUTS International, its programme areas, activities and expertise was provided to the participants. Starting with consumer protection activism at the grassroots level, CUTS ventured into research and advocacy in the field of international trade during the peak of Uruguay Round in 1991, and since then has contributed immensely and distinctly as a non-governmental organisation (NGO) at the international level. CUTS undertakes a number of similar training programmes, especially in commercial diplomacy and international trade. Training on IPR issues was first undertaken in May 2008 and, since then, two programmes on the topic were successfully carried out.

Expectations of Participants

Towards the conclusion of the inaugural session, participants were requested to express their expectations from the training programme. Topics which they expected from the programme are summarised below:

- Difference between types of legal instruments used for IP protection, like patents, copyrights and trademarks and their application in India;
- Relationship between TRIPs and related Indian legislations;

- Stages and methods involved in patent drafting and the procedure of filing patents;
- Specific topics on feasibility of industrial packaging design registrations, patenting of traditional knowledge, chemical processes and plant varieties;
- Various aspects of IP management;
- The legal issues related to the life of patents, IPR infringements, etc.
- Difference between Indian and foreign patent laws; and
- Specific topic on implications of TRIPs for agriculture research in India.

Session I

Overview of the WTO, Atul Kaushik

Atul Kaushik introduced the WTO and gave a comprehensive overview of the history, purpose, structure and significance of the organisation. He started off by placing the evolution of WTO in a historical perspective. Towards the end of the Second World War, the international community unanimously decided to create an institutional structure to shape a new world order for peace and prosperity. The Bretton Woods conference in 1944 set forth an agenda to create International Trade Organisation (ITO), along with the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD). The concept of the ITO did not materialise predominantly because the US congress failed to ratify it and, subsequently, an Agreement, called the General Agreement on Tariffs and Trade (GATT), came into being, the purpose of which was to bring down tariff walls demarcating countries.

Kaushik briefly dealt with the economic benefits of trade liberalisation, the concept of comparative advantage and the theoretical underpinnings of international trade, before explaining the features of the GATT. The GATT 1947 provided a platform for reciprocally reducing tariffs, using a request-offer approach. Mutually exchanged tariff reducing concessions by way of bilateral negotiations between two members were then extended to other member countries, by means of the non-discrimination principle. Therefore, the principles of reciprocity and non-discrimination (MFN) are at the core of the GATT. The Agreement progressed in the direction of trade liberalisation, through a series of negotiation Rounds, and the concessions agreed upon in each Round were bound through its enforcement mechanism.

After quickly explaining the functioning of the GATT system, **Kaushik** explained the history of the Agreement and its run up to the formation of the WTO. The first four rounds of the GATT concentrated solely on tariff reduction. The fifth Round, held in Geneva, introduced reduction of non-tariff barriers (NTBs) into the purview of the GATT. He explained the nature of NTBs, like domestic regulations, standards etc., and the concept of National Treatment used in the GATT to counter them. The issue of the NTBs and allied trade-distorting practices gained momentum in the subsequent Rounds and several trade-remedy concepts, like anti-dumping measures and countervailing duties, formally became part of the GATT negotiations. **Kaushik** elaborated these concepts in detail using examples.

By the time the GATT negotiations reached the Uruguay Round, specific issues related to trade in agricultural products, textiles and services became contentious. **Kaushik** described the background of these specific issues and also spent some time in

demystifying certain technical terminologies commonly used in the GATT. He briefly narrated the issue of services and why and how a separate Agreement on services was brought in the Uruguay Round. The topic of codes, which were applicable to limited number of members, the codes for anti-dumping, subsidies and safeguards, were also referred to.

The gamut of issues to be considered under trade liberalisation escalated and, as a result, in the ambitious Uruguay Round, the WTO was created to replace the GATT. **Kaushik** talked about the distinguishing features of the WTO, which is a full-fledged organisation, rather than an agreement. In fact, the WTO acted as an umbrella institution to govern separate trade agreements and codes. The dispute settlement mechanism of the WTO was also restructured, making it considerably superior.

Towards the close of this session, **Kaushik** recounted the background of the ‘Dunkel Draft’, which paved the way for the WTO, and the origin and the meaning of the concept of single undertaking. He also mentioned the political economy dynamics behind the Uruguay Round negotiations. This discussion summed up the emergence of the WTO from the GATT regime as a rule-based multilateral trading system. At the behest of some of the participants, remaining time in this session was effectively utilised by **Kaushik** to delve deeper into the Agreement on Agriculture (AoA) and the many contentious and sensitive issues surrounding it. He also explained the structure and the functions of the WTO, as well as the principles of the MTS.

Session II

Overview of TRIPs Agreement, Archana Jatkar

Introducing herself at the outset, Archana **Jatkar** laid out the objective of the session, which is to provide an overview of the TRIPs Agreement. She said that the need for having an overview of TRIPs is that this Agreement brings the process, under which many different IP laws are governed, by one common international law. A holistic idea of the TRIPs would help the participants to easily grasp the complexities of specific national laws. Her presentation was structured in the following sequence:

- (i) Brief history of TRIPs Agreement;
- (ii) Basic principles in TRIPs;
- (iii) Types of IPRs addressed in TRIPs; and
- (iv) Institutional arrangements provided in the TRIPs.

Prior to the TRIPs, there have been a number of international conventions and treaties covering the IPRs. **Jatkar** touched upon different treaties governed by the World Intellectual Property Organisation (WIPO). These instruments of IP protection under WIPO could not take off either, because of limited membership or because they addressed general issues without focus. She mentioned that the escalation of IP infringements, owing to increase in international trade and development of electronic commerce, forced the members of the WIPO to consider harmonisation of IP laws and enhance their enforcement. Thus, trade-related IP protection measures became part of the Uruguay Round negotiations and was, subsequently, integrated into the WTO framework.

Treading deeper into the features of TRIPs, Jatkar said that the Agreement seeks to establish minimum standards of IP protection. These minimum standards should be complied with by members via incorporation of such standards in their domestic laws. At the same time, certain flexibilities are built in so that WTO members at different stages of development adapt gradually to the new international legal framework. **Jatkar** further elaborated on specific provisions on standards and flexibilities. Moreover, the overall objectives of the TRIPs, as a WTO Agreement, to remove trade distortions and to act as an interface between the WTO and the WIPO conventions, were mentioned, along with the mechanism through which TRIPs attains these objectives.

Like other Agreements under the purview of the WTO, the TRIPs follow the basic principles of reciprocity and non-discrimination manifested by the Most Favoured Nation (MFN) and National Treatment clauses. In addition, it lays out the principle that IP protection should contribute to technical innovation and transfer of technology. **Jatkar** then explained the types of IPRs as defined in the Agreement very briefly along with their respective terms of protection. She took appropriate examples for each of the IPRs and answered explicit queries from the participants. While speaking on the benchmark term of protection of 10 years granted for protection of industrial designs, **Jatkar** also mentioned that since it is not explicitly mentioned whether this term should be granted at a stretch, it provides developing countries some flexibility, by allowing them to grant the term of protection in intermittent periods. Reading between lines is critical while interpreting the language of the Agreement and that is why one needs lawyers in the WTO, she quipped.

Allowing the participants to raise questions on the first three sections of her presentation, **Jatkar** cleared certain points related to the interface of issues handled by the IP and competition laws. The issue of disclosure and trade secrets were also discussed at length, followed by the fine distinction between product and process patents. **Jatkar** concluded the session by providing details of the institutional arrangements provided by the Agreement. The first of such arrangements is the Council for TRIPs, which monitors and reviews laws and operations of the Agreement. The key functions of the Council are to provide a forum for consultations of member countries with each other and provide technical co-operation amongst members. Secondly, the Dispute Settlement Body (DSB) of the WTO ensures observance of the Agreement. Finally, there exist institutional arrangements for special sessions for negotiations, which currently deal with three issues in the ongoing Doha Round. namely, (i) Geographical Indications (GIs) with respect to wines and spirits, (ii) certain aspects of protection of biodiversity and the integration of Convention on Biological Diversity (CBD) and TRIPs, and (iii) the extension of special protection of wines and spirits to other specific products from developing countries. The session ended with a note on certain special exemption provisions in the TRIPs catering to developing countries.

Session III

Enforcement under the TRIPs Agreement, Atul Kaushik

This session dealt with the enforcement mechanism of the TRIPs Agreement, the basic purposes of which are to prevent infringement of rights and to take remedial actions upon such infringement. **Atul Kaushik** began this session by talking about the minimum standards set out in the TRIPs Agreement. His lecture was enriched with several historical anecdotes and actual cases and examples. Minimum standards are the

substantive obligations in each of the sections of Part II of the Agreement. For instance, the standard term of protection for copyrights is a minimum of 50 years from the date of publication. Countries may have higher protection levels in their respective domestic laws than these minimum standards. TRIPs Agreement's enforcement channel is through national laws in its member countries, as it states that the obligations have to be met territorially by each signatory. The national judiciary resources may be used for enforcement for this purpose.

Kaushik spent sufficient time on describing the enforcement channel of TRIPs and the role of DSB in the WTO. The TRIPs attempts to ensure that minimum standards are met by national laws and unless this condition is satisfied, the WTO DSB would not entertain a complaint regarding a particular patent grant. Part III of the Agreement gives the provisions for enforcement. The general obligations included here are effective action against infringement and the requirement that remedies should be expeditious and deterrent. **Kaushik** elaborated on these obligations further and said that, despite of these obligations, the TRIPs does not provide for the need to have separate codes for handling IP cases.

The next part of the presentation was dedicated to areas of interface between Indian judicial system and the enforcement provisions of the TRIPs. Two kinds of procedures are in place for enforcement, civil and administrative, on the one hand, and criminal procedures on the other. As this code of conduct is followed, the Indian judicial system satisfies the norms set by the TRIPs. **Kaushik** elaborated on the principle of natural justice and the concept of burden of proof. The normal rules of evidence, enshrined in the Indian Evidence Act, would suffice for enforcement of IP laws as well, with the exception of process patents. While citing the case of 'Tamiflu' drug, he said that one change many countries, including India, had to make was to transfer certain quasi-judicial functions from the judicial authorities to administrative authorities to meet the minimum standards under the TRIPs Agreement. At this point, responding to queries raised by participants, the lecture digressed into the history of the induction of the TRIPs Agreement into the WTO.

Coming back to the main discussion, **Kaushik** explained the Article on acquisition and maintenance of IPRs. Further, he mentioned the provisions under the WIPO which were adopted by reference into the TRIPs Agreement. Changes in the IP laws in India, with respect to enforcement, were minuscule and some of the main ones were listed. Some changes made, not for TRIPs compliance, but for the benefit of industry, were also listed. In the interactive discussion which followed, **Kaushik** explained the legal aspects of enforcements, using actual cases which came up in due course of implementation of the TRIPs. For example, he explained, that no violations were found in the EC-Trademarks and GIs case as well as in the US Section 211. In the US vs China case on copyright protection violation, copyright protection was completely denied or trademark infringing goods were put out in the Chinese market, but policy space to use public interest exceptions appears to have been preserved. He also discussed some of the emerging issues associated with enforcement, concluding that the WTO Appellate Body was unlikely to intrude too much into the domestic legal procedures on enforcement.

In the final part of his presentation, **Kaushik** asserted the effectiveness of dispute settlement system of the WTO. The International Code of Justice, since its inception, has had less number of cases than the WTO in the first ten years of its existence. The WTO

dispute settlement system, having settled about 280 odd cases during this period, enjoys trust and confidence of the international community more than even the UN. Three aspects, viz., (i) time bound resolution of disputes, (ii) effective appellate body to review and filter wrong judgements at the lower level, and (iii) a rigid system to retaliate against the non-complying defendants, make WTO's enforcement system credible and superior.

Session IV

Patents in the WTO TRIPs Agreement and the Indian Law, Prabuddha Ganguli

Prior to the session, **Prabuddha Ganguli** thanked CUTS for inviting him as a speaker and appreciated the initiative of the Department of Science and Technology and CUTS. He mentioned that he has been associated with CUTS for about 20 years and initiatives like this training programme have been the hallmark of the organisation, which has been engaged in sensitising the civil society on issues of paramount importance. In his interactive presentation, which followed, clarifications of queries raised by the participants were given, as and when they arose, rather than at the end of the session. He warned the participants that the subject of IPR is very vast and complex, with many diverse views, and, therefore, should be grasped with open-mindedness and reminded that his session will be oriented in such a way that the general overview about the TRIPs given on the first day of the training programme will be consolidated, with specific and deeper analysis. In order to make them aware of the delicate, but extremely important, distinctions between different types of intellectual properties like patents, copyrights, trademarks, geographical indications, etc., he started by asking each of the participants about their perception on the concept of IP.

Ganguli showed that there are different ways to innovate and these ways are associated with different functionalities or characteristics. This is the reason why different types of intellectual properties are defined distinctly. For instance, inventions are essentially solutions to technical problems, representing a particular functionality, and patents deal with inventions only. He went on to explain the distinctive features of each type of IPs. In his exposition, **Ganguli** brought to the fore the fine distinction between discovery and inventions, which may feature in certain types of IPs. In the case of Plant Variety Protection, there are certain varieties which are natural and discovered by somebody and other varieties which are created or invented by a scientist. Both discoverers and inventors of new varieties may stake claims for an exclusive right and the law must tackle them separately. He summed up the introductory part by stating that though terminologies like patents and copyright are distinct, together they represent the expanse of ways in which the human mind creates and these terminologies represent tools with which we protect such creations.

The session progressed to the discussion of the TRIPs Agreement. **Ganguli** started off by saying that the WTO, basically, is a networking of laws and there are interfaces between these laws. The WTO moulds general idea of IP laws into trade framework. This concept was elaborated and placed the TRIPs Agreement in perspective. The generic structure and purpose of every law was explained to the participants. Firstly, the law creates a benchmark and tries to restrict deviations from it by enforcement. Therefore, the second part of the legal structure is to set forth means to treat, or restrict, deviation by some kind of punitive action. The TRIPs Agreement does the same by creating benchmarks or minimum standards and ensures compliance by member countries by setting certain

punitive courses of actions. Keeping this generic structure in mind, he went into the details of provisions contained in the legal text of the TRIPs.

While explaining carefully the legal terminologies used in the TRIPs, **Ganguli** pointed out that these terms are not always objectively interpreted and there are lot of subjective aspects to them. There exist flexibilities in the TRIPs Agreement and each provision has some kind of in-built flexibility. The importance of the words novelty, inventiveness and utility were exposed and he also discussed the patentability criteria and exceptions by analysing Article 27 and 27.3 of the TRIPs Agreement. He discussed at length Article 31(f), i.e., compulsory licences were to be granted predominantly for the domestic market, and their relevant conditions.

Having sufficiently discussed the important provisions under the TRIPs Agreement, he further elaborated on the most important provisions of the TRIPs Agreement and drew parallels with Indian Laws. Act VI (1856), Act XV (1859), Patterns and Designs Protection Act, 1872 and Act of Patent (1911) were the predecessors of the Indian Patent Act, 1970. After talking about the salient points of the Act of 1970, he dealt with the main amendments made therein to make it TRIPs compliant. Though the spirit of the TRIPs Agreement was brought in, there are certain finer points which distinguish the Act of 1970, which is now known as the Indian Patent Act, 2005. Though the entire session was anchored on patents and related queries, relevant questions related to other forms of IP were also answered. The discussion digressed into the topic of traditional knowledge and the way it is treated in the TRIPs and the turmeric case related to this issue was examined in detail.

Before concluding the session, **Ganguli** discussed the germane provisions in TRIPs relating to trademarks, copyrights, layout designs of integrated circuits, plant variety protection, protection of biodiversity and compared them with the provisions in corresponding Indian laws, with particular emphasis on Copyrights and Trademark Act.

Session V

A Brief Overview of IPR Laws in India, Prabuddha Ganguli

As a continuum of his earlier expositions, **Prabuddha Ganguli** concentrated on the specifics of Indian IPR Laws which included laws relating to copyrights, trademarks, layout designs, etc. He started off with a discussion of the Copyrights Act. The Indian Copyright Act is not fully TRIPs compliant, but is a very advanced copyright law. The Copyright Act of 1957 was amended in 1999 and is still undergoing changes. Copyrights protect expressions and the crucial question of how many types of expressions are possible comes to the fore. There is an entire range of expressions re-coded, broadcasted and published in many different forms. The issues herewith centre on the right to the original work of expression, like a book, and the right to the derivatives or adaptations, like a translation of a book. India is a member of the Bern Convention which, in principle, guarantees copyrights awarded in one of the member states will be respected within the jurisdiction of other members. But, in this case, Indian right holder may have to comply with certain conditions imposed by a foreign Bern Convention Member.

Ganguli differentiated various IPR laws by taking the example of computer programmes which may be protected as a copyright or a patent. Often, protection for computer programmes is sought in the form of patents. Being a patented product gives certain

advantages over other instruments of protection because of discrepancies between the existing laws on different instruments. He further elucidated the fine nuances of copyrights, patents and trademarks in which disputes often erupt on the basis of minor similarities. The examples used were from fashion designing and film industry, where there exists a very thin line between works which are inspired by similar works and works which are copied thereof. Again, taking the example of press reporting and journalism, the idea was conveyed that while a holistic form of expression may be copyrighted, a specific portion of its content may not be protected.

The session advanced from Copyright and Patent Act to trademark. The Trademark Act of 1999 is fully compliant with the TRIPs. Latest developments in trademark are related to Madrid Protocol, in which India is a member. Unlike Copyrights, Trademark protection can be continued perpetually, with renewal of licence. Variants of trademark are certification marks and collective marks. Provisions for these variants as well as trademarks for services were also included in the ACT of 1999. Compliance requirements with TRIPs have refined the Indian Trademarks Act. **Ganguli** detailed the nature of amendments made and the need for such amendments. **Ganguli** also discussed provisions related to geographical indications in Indian law and compared it with provisions of the TRIPs Agreement. He also explained several characteristics of GIs, by citing relevant examples.

Session VI

Group Discussion on ‘Confiscation of Goods in Transit’, Prabuddha Ganguli

With the objective of giving the participants a first hand experience of practical issues faced by practitioners of IPR laws, **Prabuddha Ganguli** anchored a group discussion towards the end of his lectures. He circulated a case involving the issue of confiscation of goods in transit. On December 04, 2008, the customs authorities of the Netherlands seized a consignment containing generic medicines, en route India, to Brazil on account of violation of property rights. This generic drug, i.e. Losartan Potassium, was being traded between two leading pharmaceutical companies of the respective countries. After 36 days of retention at the Netherlands, the customs authorities released the cargo, which was directed back to India, rather than permitting it to sail ahead to Brazil. A major issue of whether such confiscation is within the purview of the WTO rules, given Article V of the GATT, which provides for freedom of transit.

Ganguli urged the participants to debate on the issue rationally and objectively with an unbiased and non-emotive frame of mind. The discussion started on the ethical issue of exporting counterfeit goods and proceeded to several pertinent issues. Some of the main contention points involved in the case were (i) ethical issues involved in trading counterfeit goods, even if both the trading countries does not have domestic IP protection laws, and (ii) the rationale of confiscation of counterfeit goods in a foreign territory in different scenarios, viz., (a) both trading countries have IP protection, (b) neither have IP protection, but the territory in which confiscation was carried out has IP protection, and (c) either of them have IP protection. The discussion gave the participants an opportunity to apply their learning in the first two days of the conference.

Session VII

Patent Drafting, Rajeshwari Hariharan

At the beginning of this session, **Rajeshwari Hariharan** asserted the importance of handling patent drafting process professionally. Through a real world example, she showed that even minute mistakes in language might invalidate the protection obtained through an IPR. Drafting should be carefully done, keeping in mind the facts that there is time limitations for filing an application and also the application is going to be examined by lawyers, licensee and other officials, the public, NGOs, etc. who may not understand the technical terminologies used in the application. Therefore, it is crucial to strike a perfect balance between technical and non-technical language for laymen.

Ideally, drafting should be preceded by careful planning and preparation. The main steps involved in the drafting process are:

- (i) Identify the invention;
- (ii) Define the claim on an invention and description of the claim, drawings, terminologies, illustrations, etc.; and
- (iii) Structure the application – background/theme of the invention, description of claim and evidence of originality.

Hariharan explained each step involved in patent drafting in detail, by using suitable examples. It is always useful to quote prior research or patents filed earlier in related fields, though it may not be possible in pioneering research fields. She provided a list of useful websites and references of resources, which would help in conceptualising the drafting process. The sequential order of the main points to be remembered while drafting is:

- (i) Novelty of the invention;
- (ii) Inventiveness involved in the invention;
- (iii) Utility or usefulness of the invention;
- (iv) Whether the invention involves any manner of manufacture; and
- (v) Patentability of the invention according to the law of the country.

Certain finer points regarding filing of application were dealt with in detail. **Hariharan** pointed out that if one particular invention can be replicated in several ways or can be commercially utilised through several applications, it would be better to file separate applications for them. Useful tips for giving the title, selecting the field of application, etc., were shared with the participants. Using demonstrations from copies of patent applications, the participants were introduced to the common mistakes that should be avoided when the patent application is drafted and filed. In conclusion, she reiterated that the primary objective of a patent application, to reserve an exclusive right, should always be kept in mind and disclosure of information through a patent application should be done judiciously.

Session VIII

Patent Filing and Grant, Rajeshwari Hariharan

In this session, **Rajeshwari Hariharan** dealt with a general overview of international patent filing and prosecution, with specific focus on the legal procedures of patent filing and disputes. The first part of this session was devoted to explaining the concept of the patentability criteria. In this discussion, taking the example of Coca-Cola, **Hariharan**

demonstrated the difference between trade secrets and patents and subsequently the measure applied to verify whether a particular claim qualifies for a patent. The notion of ‘inventorship’ is also important in the post-filing processing of patent claims. In case of multiple claims, the ownership of the claim may belong to more than one individual or organisation. The US law allows processing and attributing ownership of claims individually, but that facility is not available in most of the other countries.

Hariharan then proceeded to explain that the timing of the filing of the patent application is also important. Patents claim shall only be filed when there is substantive evidence to support the claim. Taking examples from the medical research field, it was elucidated that claims based on speculations would not be entertained in an examination process. Many a times, highly competitive research field forces the inventor to prematurely file a claim and lose out while acquiring it. While patents are used as a tool by businesses, they have to plan the filing process well in advance, and strategically.

Having decided when the patent is to be filed, where it is to be filed should be the next concern, because the filing process could be expensive and returns or benefits one expects from such an investment may very well depend on the place of filing also. **Hariharan** explained the differences between patent filing systems followed in the US and the EU and compared them with procedures followed in India. Though countries like Japan and Australia have the same system as that of the European Union (EU), wherein examination succeeds filing of application, followed by examination report, based on which the right is granted, the procedures are comparatively more flexible and user friendly in Australia. The entire patent filing system in Japan is made difficult and expensive because the process is done in Japanese language.

Another important aspect of patent filing is that filing of one single patent is unadvisable. One has to create a portfolio and file multiple applications in order to counter the competitors. The general strategy followed is to create a minefield of patents by filing patents on various components of an area in a sequential manner continuously over a period of time. Several examples were cited to show how such a strategy creates entry barriers successfully.

In the question-answer session which followed, **Hariharan** answered the queries on the procedure for filing patents abroad, discrepancies which may crop up with respect to dates of filing and certain specific questions on the duration and extent of applicability of rights. An Indian inventor has to file a patent in India first, before filing abroad. During the interim period between filing and actual granting of right to the inventor, protection to IP is not offered, therefore, the inventor may publish details of his application and keep tabs on competitors. He may file a case against an infringement after the right is granted, in case such an infringement occurred in the interim period. The ideal strategy is to file and obtain the patent/IP right well in advance, before the product is launched in the market. But practically, the timing of patent filing and launching very much depends on the technology involved.

Session IX

Simulation Exercise: Drafting a Patent Application, Rajeshwari Hariharan

Following the previous sessions on the nuances of patent filing and drafting process, **Rajeshwari Hariharan** carried out a simulation exercise on drafting a patent application, to give the participants a feel of practical issues involved in filing of an application. Taking hypothetical examples, a demonstrative lecture was offered as to how to draft the application and how to formulate claims for the given invention. She explained that the skill sets needed for inventing and writing specifications about the invention for the purpose of staking a claim are entirely different. One should be aware of the key points of patentability criteria, full disclosure, concept of title and illustration, etc. in order to draft an application.

Hariharan gave the assignment of drafting a patent application for a ‘tea pot with two spouts’ instead of one. There are certain advantages of this invention over the conventional tea pots. The participants were asked to start off by identifying those advantages. They were then asked to follow the sequential steps in framing a claim, which would finally lead to the final draft of the application. The idea of direct and indirect claims was introduced while working out this example.

The participants took keen interest in the drafting of the application and came out with their claims. **Hariharan** evaluated the exercise and she gave constructive feedbacks. The session facilitated better understanding on the process of framing claims. The simulation proved to be extremely useful for the participants in order to understand the key points *vis-à-vis* the grant of patent.

Session X

Patent Protection and the Indian Agriculture Sector, Joseph George

The purpose of this session was to explore certain economic impacts of IPR laws in general, citing the case of agriculture sector in India. **Joseph George** took this session in two parts. Firstly, the interface between IP protection and competition policy was discussed, in order to substantiate the point that stringent IP laws may not always be desirable and, therefore, framing a balanced IPR regime is a difficult task and, secondly, the application of Plant Variety Protection in India was introduced to illustrate this point. **George** started by questioning the rationale that strong IP protection is absolutely necessary for fostering innovation and growth.

While IPRs may provide incentives to innovate, such exclusive rights give rise to monopolies. Industries with monopolistic market structure are often breeding grounds for inefficient production and consumption. Moreover, because what is otherwise known as rent-seeking behaviour, a monopolist may have no further incentive to innovate. Competitive market structures, on the other hand, may lead to innovation in a better way, as competitors try to create a market niche for themselves, through product differentiation. **George** then gave a brief overview of the theoretical and empirical discourse on market structures and innovation in the literature.

Introducing the concepts of dynamic and static efficiency from a macroeconomic point of view, **George** said that, given the IPR theme, there is a fundamental conflict between

static efficiency, which requires maximum reach of benefits of innovation at minimal social costs, and dynamic efficiency, which demands investments in innovation for maximising social benefits. Excessively weak IPR regime favours the static efficiency goal, but may hinder dynamic efficiency targets. An efficient IPR system has to take into account both these considerations and strike a balance between them.

In the second part of his presentation, **George** cited certain arguments in favour of and against strong IPRs in Indian Agriculture. Agriculture is getting exposed to an entirely new set of technologies. The constraints on productivity in developing country agriculture have become much more acute since the late eighties. Furthermore, Green Revolution varieties have reached their maximum yield potential. Fiscal burden would not cover the cost of effective target investments, since such costs have escalated, owing to cutting edge and highly capital-intensive biotech research. He said that, in order to attract private players, a stringent IPR regime must be in place. Following this, certain counter arguments were presented. Given the sensitivity of agriculture to food security, strong IP may hike up the prices of advanced varieties of seeds, beyond the access of subsistence farmers.

George gave a brief overview of main IP instruments applicable to agriculture, as well as the introduction of Plant Variety Protection (PVP) Act in India. The first initiative in this direction came in 1980 and after 20 years, it materialised as Plant Variety Protection and Farmer's Rights (FR) Act, 2001. The Indian Act chose to adopt Plant Breeder's Rights (PBR), with exemptions, using the *sui generis* system facilitated by the TRIPs. By including Farmer's Rights and exemption to the PBR, the PVP and FR Act, 2001 has tried to balance the mutually conflicting IP protection demands of the agricultural sector. In conclusion, **George** posed the question whether the current design of the PVP is too weak and, if yes, what are the alternative solutions. The participants actively participated in the final discussion and threw up a number of important suggestions. The major conclusion which emerged was that the best way forward is to adopt private-public partnership (PPP) model in plant variety research.

Session XI

Relationship of IPRs with Biotechnology, Traditional Knowledge and Access and Benefit-sharing, Sunita K Sreedharan

Sunita K Sreedharan initiated a discussion on the definition of traditional knowledge at the outset. Agricultural practices, weather prediction, knowledge acquired by nomadic groups, etc., qualify as traditional knowledge. She expressed that traditional knowledge is that which is typically not scientifically derived or empirically established. The importance of the usage of the terms industrial application and novelty were explained, using examples such as usage of turmeric and neem leaves. Engaging the case of '*arogyapachcha*', a herb with medicinal properties which was marketed as a health product, **Sreedharan** emphasised on two important aspects which are to be taken care of while dealing with granting rights on traditional knowledge:

- (i) Appropriate share of claims on economic profits should accrue to the original tribe which processed the knowledge; and
- (ii) Traditional resources should not be commercially over-exploited, disturbing the balance of traditional societies.

Coming to the specific aspects of agriculture, **Sreedharan** emphasised the importance of biotechnology and plant varieties protection, given the demand for increase in

agricultural productivity. She explained the major issues that concern IPR in agricultural research and development (R&D) in India such as patents and *sui generis* IPR protection system in agriculture. She covered PVP and farmer's rights legislation and discussed key provisions of the TRIPs Agreement, such as Article 27.3 and PPV and FR Act 2001, PVP and FR Rules 2003 and PVP and FR Regulations 2006. She pointed out Section 2(z) that defines varieties as follows:

- (i) Plant grouping (except micro-organism) within single botanical taxon of the lowest known rank;
- (ii) Defined by a genotypic expression;
- (iii) Distinguished from others by at least one characteristic; and
- (iv) Considered a unit suitable for propagation.

Sreedharan mentioned that the term of protection for these varieties differs as per their category, for example, for trees and vines, the protection is for 18 years from the date of registration of the variety; for extant varieties, it is 15 years from the date of notification of the variety by the government under Section 5; and for others, the term of protection is 15 years from the date of registration of the variety. The breeder, his successor or assignee, farmer/group of farmers/community of farmers and university or publicly funded agricultural institution can be applicants. Further, she discussed the procedure and compliance as per the Biological Diversity Act, 2002.

While clarifying the triadic relationship between IPR, biotechnology and traditional knowledge, **Sreedharan** emphasised that it is very important to keep ethical standpoints in the forefront. Many IPR issues concerning access and benefit-sharing of traditional knowledge are subjective and, therefore, decision-making must heed to moral responsibilities. She stressed on the need for IP audit and cited examples for better understanding of the participant and mentioned that knowing the law is extremely important for an inventor/right holder, as ignorance of law is no excuse. She suggested that one should start the research by patent landscaping and could protect his/her interests and get patents by being offensive. The session was extremely interactive, as it involved practical approach to obtain IPRs, and participants found the session valuable in their routine work at the office. Their queries were satisfactorily answered as well.

Session XII

State-of-Play in the WTO Negotiations on TRIPs Issues, Atul Kaushik

Atul Kaushik started the session by giving a brief overview of the earlier negotiation process in GATT, i.e. before the inception of the WTO. During the GATT days (1947-1995), negotiations were carried out in seven 'Rounds', wherein, firstly, countries consulted with each other bilaterally and came together for multilateral exchange of concessions, which are accepted by all participating countries. This model of negotiations was deemed undesirable as it could not increase the pace of liberalisation between the Rounds by adding new commitments. An alternative model of negotiation, without the 'Round' concept, was mooted by GATT members to overcome this shortcoming. Therefore, in the Uruguay Round, in which the creation of the WTO was negotiated, a provision was added, such that the WTO will provide a forum for continuous negotiations. The suggested new model would create separate negotiation councils for each subject and the council or committees constituted thereof would have the power to conduct negotiations on subjects within their respective purviews.

Kaushik went on to explain the structure and negotiation procedure of WTO in detail. He explained that the members found it difficult to strike a balance in all negotiation areas with the new model under WTO and, therefore, decided to revert back to the 'Round' system wherein negotiations on all areas, like agriculture, industrial goods, services and intellectual property, would be linked to each other and conducted simultaneously. The idea of a new Round was materialised in the Doha Ministerial (2001) and given the political and economic situation of that period and aspirations of developing countries, the Ministerial declaration at Doha named the new Round as the Doha Development Round.

Unfinished subjects carried over from the Uruguay Round were treated in the Doha Round as built-in agenda. This basically contained negotiations in certain sectors of services, aspects of geographical indications in the TRIPs Agreement and further liberalisation of the agricultural sector. Apart from these, new negotiations on trade and environment, dispute settlement, certain aspects of trade remedies, implementation-related concerns of developing countries, etc., were also launched. The overall objective was to bring down trade barriers, especially reduce the tariff lines to zero, wherever possible. Answering a question as to whether this means dismantling of customs authorities in countries around the world, **Kaushik** quipped that old agencies like customs could reinvent themselves with larger roles and continue to exist, by citing the example of how the office of the Chief Controller of Imports and Exports (CCI&E) was transformed into the office of the Director General of Foreign Trade India (DGFT).

Kaushik then proceeded to explain the specific issues negotiated under the TRIPs Agreement in the Doha Round. Basically, two areas of the TRIPs are being negotiated. The first relates to geographical indications, specifically the mode of higher level of protection, as in the case of wines and spirits. This issue came as a built-in agenda in the Doha Round. The second area relates to the UN CBD, which is aimed at (i) reassuring the world that biological resources are sovereign national properties, rather than being globally common, (ii) that there will be disciplines to conserve biological diversity, (iii) and that there is a system for sharing of the benefits of utilisation of biological diversity commercially. One of the participants enquired whether the creation of national biological parks comes under the CBD. **Kaushik** answered that individual states may exercise the right to treat the biological resources as their sovereign properties and, in return, they shall pledge to conserve such resources in a sustainable manner. Therefore, creation of national parks would come under the conservation aspect of the CBD.

The aspect of benefit-sharing in the CBD was not implemented because several countries, including India, argued that other IPs like patents and copyrights are private rights, whereas it is a public right, when it comes to the protection of biological resources. There is a conflict between the CBD objective to conserve and share benefits with traditional communities and the private rights granted under the TRIPs. The difference in approaches of these two treaties needed harmonisation so that the TRIPs conforms to the CBD. India was the first country to make this proposition in the WTO and this agenda has gained significant momentum since then.

To a query regarding the methods of benefit-sharing devised under the CBD, **Kaushik** replied that conceptualising such a method is difficult, but not impossible. Under the Biological Diversity Act, India has created bio-diversity authorities at the national, state and district levels, which provide data and make it possible to take a decision as to how

the benefits can be shared. **Kaushik** further expounded the details of the negotiations on GIs and BD issues in the Doha Round, by citing examples like Basmati rice, Darjeeling tea etc. He narrated various situations in which the party who infringes upon the right under the GI could be held liable with respect to the two levels of protection granted under the GI.

In the interactive final part of the session, which followed, **Kaushik** answered questions on the method of filing rights under the GIs, the procedure for resolving complaints as well as some of the difficulties involved in ascertaining the right over biological resources, disclosure of source of origin issues, the role of traditional knowledge, etc. On the current state of play in the Doha Round, he explained that negotiations on these issues are stalled at present, but may soon be resumed, once the deadlock over market access in agriculture and industrial goods is untied and also depending upon the stance of the new government in the US. While dealing with the intricacies of harmonisation between the CBD and the TRIPs, he mentioned that there are innovative ideas to integrate benefit-sharing methods, like creating individual national laws with national level benefit-sharing provisions and then identify and utilise those provisions through an overarching international treaty. In conclusion, **Kaushik** opined that, like in other negotiations, in the TRIPs also, India should do a cost-benefit analysis or a realistic assessment to see what kind of a balance in the Agreement would suit the country most.

Session XIII

Climate Change, Technology Transfer and IPRs, Aparna Shivpuri

Aparna Shivpuri explored the link between trade and environment in the beginning. This link is established by the fact that most of the goods traded involve natural resources. The GATT preamble emphasises on preservation and protection of the environment. In addition, Article 20 allows certain exemptions, aiming at the same purpose. There have been plenty of cases raised in the WTO as well as extensive usage of such exemptions, highlighting the importance of environmental concerns in trade.

Shivpuri said that the IPR raises several bio-ethical and social concerns regarding illegal use of traditional knowledge, genetic resources and transfer of technology. The linkage between trade and climate change is more explicit. Several studies show the alarming rate at which greenhouse gases are emitted, as a result of increase in economic activities. This, in turn, would also affect biodiversity, resource depletion, etc., and, therefore, these issues are intertwined in a complex manner. Already, measures like eco-labelling are adopted in trade governance, in order to take into account the effects of harmful emissions. She presented an exposition, based on emission data, comparing major trading countries in the world.

Transfer of technology may be defined as transfer of systematic knowledge for manufacturing a product, application of a process or rendering of a service. **Shivpuri** detailed the channels of transfer of technology. Technology transfer in the context of climate change means transfer of technology that has the potential to significantly improve environmental performances. Two major categories of these are (i) end of the pipe technologies and (ii) clean technologies. The developed countries want to sell these technologies to reap commercial benefits. **Shivpuri** introduced the major multilateral agreements covering climate change, viz., UN FCCC, Kyoto Protocol, Montreal Protocol

and the Bali Action Plan. All these agreements have specific provision for transferring technologies related to environmental protection, but do not mention IPRs.

The relationship between the IP and climate change is largely an unexplored grey area. **Shivpuri** analysed the provisions in the TRIPs which could be linked to transfer of technology to combat climate change. Principles laid out in Articles 7, 8, 27, 30, 40, 62 and 66.1 could be used for technology transfer, though they do not exclusively deal with it. She talked about the latest developments in the area while concluding. Talks on multilateral level are still progressing. A plan to set up a multilateral technology acquisition fund is also in the pipeline. Special incentives to innovation on climate change mitigating technology, public investments, etc., are some of the other discussion points.

Session XIV

Group Discussion on ‘Patent Protection in the Pharmaceutical Industry’, Archana Jatkar

In the penultimate session, Archana Jatkar facilitated another round of discussions by dividing the participants into two groups. Both groups were given a pharmaceutical patent protection case each. The cases given were:

Group (A) - An application for an injunction order from the Delhi High Court judge Justice Ravindra Bhat (i.e., *Cipla vs Roche*); and

Group (B) - A case study on the recent Madras High Court, India, judgment on a writ petition filed by Novartis AG, challenging the legal validity of Section 3 (d) of the Indian Patents Act (i.e., *Novartis vs NATCO*).

The details of these cases were provided and the participants then studied and discussed the following questions, keeping the cases in perspective:

- Does the TRIPs Agreement really matter in the context of domestic health needs?
- Has India taken all steps necessary to ensure that the TRIPs Agreement does not come in the way of the health needs of its citizens?
- What implications of the TRIPs Agreement, if any, have been actually felt on the ground in India?
- Is the Indian administrative and judicial machinery equipped to benefit from the positive and fend off the negative implications of the TRIPs Agreement?

The discussions encompassed several topical issues in IPR governance. On the one hand, arguments in favour of a strong IPR regime were explored and the need for having exemptions to such a stringent system was considered on the other. Most of the participants were of the opinion that India did well by sticking to the minimum standards set by the TRIPs and that it should use the flexibilities provided by the Agreement judiciously in the national legislation in order to counter the ill-effects of strong IPRs. India should improvise within the current intellectual property model and flexibilities.

The TRIPs Agreement enhances competitiveness in many sectors, but sensitive sectors like health care may be excluded or at least partly exempted from strict enforcement,

taking into account the public interest aspect of health. Some participants raised doubt whether India has taken all steps necessary to ensure that the TRIPs Agreement does not come in the way of the health needs of its citizens. The discussion touched upon several generic topics as well. The lack of expertise and awareness amongst the cadres of Indian administration was condemned. The need for revamping research and development structure in India, the drawbacks of IP Management system in the country, suggestions for improving IP Management so as to improve technology absorption process, etc., were the other areas of the discourse.

Evaluation of the Seminar and Closing Remarks

Atul Kaushik and Archana Jatkar

In the closing session, a stocktaking exercise for the entire programme was done. The significance of IPRs and their implications for research activities in India were revisited briefly and the floor was unanimous in upholding the usefulness and importance of conducting similar training programmes more frequently for generating awareness amongst research community.

Archana Jatkar took feedback forms, which were distributed earlier, from the participants, who appreciated the opportunity provided by the programme in terms of a clear understanding of various issues involved in IPRs. The programme served as a platform for the scientists to get exposed to complex IPR issues and understand these issues deeply by sharing and discussing with resource persons as well as among themselves. They commended the rich experience and expertise of resource persons, the quality of resource material and overall administration of the training programme.

Responding to the request for critical comments, some of the participants proposed that future training programmes should be as much wider as possible in coverage, by including sectoral IPR issues in energy, agriculture, etc. Some wanted reading material to be sent in advance and some others wanted more case studies to be discussed, which should be provided a day in advance to the discussion groups. One comment was related to having different resource persons each day, while another one was to have one field visit involving an IP related exposure. Sessions on AoA and energy-based technologies and related IP matters, an exclusive session on plant varieties protection and a separate training programme on IP management were some other suggestions. One participant desired a starting session that could bring all participants on the same level of knowledge of IP before moving into substantive sessions.

In his closing remarks, **Atul Kaushik** expressed his deep appreciation of the initiative of the Department of Science and Technology for sponsoring the programme. He responded to some of the suggestions which could be easily incorporated into future programmes and stated the difficulties in implementing some other suggestions due to constraints of scope and budget of the programme. He also stated that the organisers regret any shortcomings during the course of the programme. CUTS will take the feedback provided by the participants into the next programme. While thanking all the participants for their active involvement, he acknowledged the hard work and contributions made by resource persons and supporting staff from CUTS.