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To: Seminar participants.  
Lecture: "Enforcement of Intellectual Property Laws"  
By: Dr. Harsha Cabral.

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**ENFORCEMENT OF INTELLECTUAL PROPERTY LAWS**  
**-DR. HARSHA CABRAL.**

It is pertinent to note briefly the history of Intellectual Property Law in Sri Lanka or its evolution in this jurisdiction prior to looking at the enforcement part of it. This branch of the law as many other Commercial Laws originated in England and thus with the introduction of English Law, lot stock and barrel were introduced to our Statute books. The chronological sequence of the laws that have been introduced in this sphere is as follows:

- The Merchandise Marks Ordinance, No. 13 of 1888.
- The Designs Ordinance, No. 7 of 1904.
- The Patents Ordinance, No. 15 of 1906.
- The Copyright Act 1911 of the United Kingdom which continued to apply to Sri Lanka by virtue of the Ceylon Independence Act of 1947.
- The Copyright Ordinance No. 20 of 1912.
- The Trade Marks Ordinance No. 15 of 1925.
- The Patents, Designs, Copyright & Trade Marks (Emergency) Ordinance, No. 32 of 1942.
- The Patents, Designs & Trade Marks (Neuchatel Agreement) Act No. 34 of 1949.
- Code of Intellectual Property Act No. 52 of 1979.(Present Act)

Ceylon as Sri Lanka was known before it became a Republic in 1972, had for almost 200 years been a colony of the British Empire. It acquired independence in 1948. It was, therefore not unnatural that the laws administered in the colony were the laws of England on the subject we

discuss today. As set out above the laws governing copyright, patents, designs and trade marks were introduced by Imperial Legislation and were subject to statutory modification after independence.

The old legal regime with its English flavour continued till a new government came into being in 1977, with its professed commitment to liberalise the economy into an open market economy where the laws of supply and demand could govern the economic activities of the nation, appreciating as a developing country, the competitive nature of the international economic scene. The erudite Minister of Trade of that time, himself a lawyer, embarked upon a programme of updating all commercial laws of the country in an attempt to keep up with the challenge.

This came into being the Code of Intellectual Property Act No. 52 of 1979, based on the World Intellectual Property Organisation's (WIPO) Model for developing countries. Sri Lanka was one of the first countries in this region to adopt this Model.

Intellectual Property Law in Sri Lanka is now codified into one Act, which is called the Code of Intellectual Property Act No 52 of 1979. The Code is divided into eight parts. Namely, administration, copyright, industrial designs, patents, marks, trade names and unfair competition, offences and penalties and finally miscellaneous, under which is embraced, *inter alia*, applications to and proceedings before the Registrar and the Court.

This Code thus *inter alia* deals with –

- Copyright
- Industrial Designs
- Patents
- Marks, Trade Names & Unfair Competition.

This Code has been in operation for two decades and except for very minor amendments (Act No. 17 of 1990 / Act No. 2 of 1983 / Act No. 30 of 1980 / Act No. 13 of 1997) no major changes have been made though several amendments to the Act are in the pipeline to become law in the near future. I do not intend touching on the proposed amendments today as they are yet to see light.

Intellectual Property Law is concerned with fostering human creativity without unduly restricting dissemination of its fruits. It concerns the full spectrum of human creativity: literature, the visual arts, music, drama, compilations of useful information, designs, trade identity symbols etc. "Intellectual" property may be a pretentious concept but is gaining momentum. Intellectual "property" begs a major policy question concerning the role of law in fostering creativity: should there be property rights in creations such as ideas and the expressions of ideas? To the extent there is a property interest in intellectual creations, it is an intangible interest that must be carefully distinguished from property in tangible materials that either make the creation possible or that the creation makes possible. An intellectual property right's basic elements are:

- (1) the subject matter it covers;
- (2) the substantive requirements for obtaining it;
- (3) the method of obtaining it;
- (4) its content; and
- (5) its duration.

Thus, Intellectual Property is an example of intangible personal property. It is a collection of ideas and information in a broadly commercial context that the law recognises as having a value by providing protection.

## Copyright

This is an exclusive right to deal with original literary, dramatic, artistic and musical works. As well as protecting the fruits of creative effort, the legislation also protects those whom have invested in those efforts by providing protection for sound recordings, films and published editions of literary work. Protection in Sri Lanka is automatic. The moment a person writes a book, it belongs to him from the moment of its creation. If he wants he can sell this right to a publisher from which point that publisher will have rights.

Vide: Part II of the Code.

Section: 6 – Interpretation.

Section: 7 – Works protected,

(1) Authors of original literary, artistic and scientific works shall be entitled to protection of their works under this Part.

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Section: 8 – Derivative works.

Section: 9 – Works not protected.

Section: 10 – Economic rights.

Section: 11 – Moral rights.

Section: 12 – Works of Sri Lanka folklore.

Section: 13 – Fair use.

Section: 14 – Ephemeral recordings.

Section: 15 – Limitation of right of translation.

Section: 16 – Limitation of right of sound recording and broadcasting.

Section: 17 – Ownership of copyright.

Section: 18 – Transfer of copyright

Section: 19 – Duration of economic rights.

Section: 20 – Sound recording.

**Section: 21 – Infringements and sanctions,**

**(1) Any person who infringes any of the rights protected under this Part may be prohibited by injunction from continuing such infringement and may also be liable in damages,**

**(2) The provisions of Chapter XXXII relating to infringements shall apply, *mutatis mutandis*, to the rights protected under this Part.**

Section: 22 – Fields of application.

Section: 23 – Abrogation of common law rights.

Section: 24 – Rights under other laws.

Case Law :-

-Wijesinghe Mahanamahewa & another v. Austin Canter (1986) 2 SLLR 154. [Copyright – System of Sinhala shorthand – Rival systems (Canter system and Wijaya system) – Infringement – Copyright Act of 1911.]

-E.R.Erathne's case. (Pending in the SC.) [Great Expectations-Romage Wasanava-Suba Anagathayak-teledrama.]

-‘Age Wairaya’- ‘Juriya Mamai’ Film Case. (Pending in the SC.)

-Cammilus's ge ‘Gajaman’. (DC action settled.)

## **Industrial Designs**

Any composition of lines or colours or any three dimensional form, whether or not associated with lines or colours, that gives a special appearance to a product of industry or handicraft and is capable of serving as a pattern for a product of industry or handicraft shall be deemed to be an industrial design.

There is no examination of an application for substance. If all formalities are complied with, registration is mandatory. This lacuna in the law has permitted copies of designs already registered, be registered. Though novelty is the key issue, case law reveal in Sri Lanka that the persons who infringe make use of the lacuna in the law to obtain registration to pirated designs. **The only recourse to the aggrieved person is to sue for damages and/or to obtain injunctive relief against infringement of his rights.**

Vide- Part III of the Code.

Section: 25 – Scope of this Part.

Section: 26 – Conditions for protection.

Section: 27 – Definition of industrial design.

Section: 28 – Definition of novelty.

Section: 29 – Ownership and right to protection of industrial design.

Section: 30 – Usurpation: Judicial assignment of application or registration.

Section: 31 – Industrial design created by an employee or pursuant to a commission.

Section: 32 – Naming of creator of an industrial design.

Sections: 33 – 41 - Requirements of application and procedure for registration.

Sections: 42 – 43 - Duration of registration.

Sections: 44 – 47 - Rights of registered owner of industrial design.

Sections: 48 – 55 - Licence Contracts.

Sections: 56 – 58 - Renunciation and nullity of registration.

### Case Law:-

-Rileys Ltd. cases (DC/HC/CA/SC)

-St.Regis Ltd cases (HC/SC)

## Patents

A patent is a grant by the government of a monopoly to a person to make, sell and use an invention for a limited period (15 years in Sri Lanka). In the context of developing countries it is said, such a system helps to protect initiative and enterprise if technological advancement is to be fostered. Clockwork radios, Cogwheels in bicycles are a few examples of well-known innovations in the world. A patent gives the owner (the patentee) the exclusive right to exploit the invention. **For up to fifteen years (in Sri Lanka), the patentee has the legal right to stop others producing the patented goods or applying the patented process by suing for infringement.** This means that, for the duration of the patent, others cannot produce the patented product or use the patented process without the patentee's permission and this is so even if a third party has come upon the patented product or process completely independently.

In Sri Lanka an application for a patent is examined only as to form and not to substance. The Code obligates the grant of a patent and the issue of a certificate in that behalf, if the Director of Intellectual Property, earlier known as the Registrar is satisfied that the application has fulfilled the required formalities. Here again there is a lacuna in the law. **If the validity of a patent is to be challenged it is to be done in nullity proceedings or as a defence in infringement proceedings.**

Vide: Part IV of the Code

Section: 59 – Definition of invention.

Section: 60 – Patentable inventions.

Section: 61 – Novelty.

Section: 62 – Inventions step.

Section: 63 – Industrial application.

Sections: 64 – 67 – Right to a patent.

Sections: 68 – 79 – Requirements of Application and Procedure for Grant.

Section: 80 – Duration of patent.

Sections: 81 – 83 – Rights of Owner of Patent.

Sections: 84 – 85 – Assignment and transmission of patent applications and patents.

Sections: 86 – 93 – Licence Contracts.

Sections: 94 – 96 – Surrender and Nullity of Patent.

Case Law:-

-Kumarasena v Data Management Systems Ltd. (1987) 2 SLLR 190. [Code – Patent – Complaint of infringement by registered owner of Sinhala Word Processor.]

-Arrack stopper case. [Pending in the DC.]

-Safe T Pack case. [Pending in the HC.]

### **Marks, Trade Names and Unfair Competition**

A mark is defined to mean a trade mark or service mark. Whether a mark is registrable or not upon application is determined on the basis of,

- (a) objective grounds &
- (b) on grounds of third party rights.

Upon acceptance, after examination as to form and substance, it is published enabling third parties to oppose the registration. Registration once granted is valid for ten years and renewable ten years at a time. **Provision is also made for a declaration of nullity of a registered mark by persons aggrieved.**

Trade name is protected even prior to or without registration against any unlawful act committed by a third party. Trade name is defined to mean the name or organisation identifying the enterprise of a natural or legal person. Protection is granted only because of the distinctiveness of the name as being reference to a particular trade source. If it is not distinctive, protection is afforded after it as acquired it by use.

Unfair competition is defined to mean any act of competition contrary to honest practices in industrial or commercial matters.

Vide: Part V of the Code

Section: 97 – Definitions.

Sections: 98 – 101 – Admissibility of Marks.

Sections: 102 – 113 – Requirements of Application and Procedure for Registration.

Sections: 114 – 116 – Duration of Registration.

Section: 117 – Rights of registered owner.

Section: 118 – Limitation of registered owner's rights.

Section: 119 – Assignment and transmission of applications and registrations.

Sections: 120 – 128 – Licence Contracts.

**Sections: 129 – 131- Renunciation and Nullity of Registration.**

**Sections: 132 – 133 – Removal of Mark.**

Sections: 134 – 138 – Collective marks.

Sections: 139 – 142 – Trade Names and Unfair Competition.

#### Case Law:-

-Suby & another v. T.Suby Ltd. (1980) 2 SLLR 65.

-Holiday Inn Inc. v. Annamalai Mutthappa & others. (1986) CALR (Vol. 1 Part iii) pg. 336.

-Hebthullahbhoj v Stassen -Rabia case.(SC).

-Smarties v Sweeties.(SC).

-MTV cases.(TM Registry/HC/SC).

-SALAKA case.(HC).

#### Enforcement

When considering the conceptual view of the Code, as a practitioner one looks at with special interest the enforcement of Intellectual Property Laws;

**-Section: 21 (Copyright -Infringement and sanctions).**

**-Section: 57 (Industrial Designs – Nullity of registration).**

**-Section: 95 (Patent – Nullity of patent).**

**-Section: 130 (Trade Mark – Nullity of registration).**

**And also Section: 179 (Infringement proceedings by registered owner of industrial design, patent or mark.)**

“Where the registered owner of an industrial design, patent or mark proves that any person is threatening to infringe or has infringed the said industrial design, patent or mark, as the case may be, or is performing acts which make it likely that infringement will occur, the Court may grant an injunction restraining any such person from committing or continuing such infringement or performing such acts and may award damages and such other relief as to the Court appears just and appropriate:

Provided that the defendant may in the same proceedings request the Court to declare the registration of the said industrial design, patent or mark, as the case may be, or any part of it, null and void, in which event the provisions of sections 57, 58, 95, 96, 130 and 131 shall apply as appropriate.”

These are the common Civil law remedies, which are very effective, and resorted to by practitioners.

There are also several effective Criminal law remedies.

(Vide: Part VI of the Code)

### Offences and Penalties

Section: 143 – Falsification of entries in any register

Section: 144 – Infringement of Copyright

Section: 145 – Infringement of industrial designs

Section: 146 – False representations regarding industrial designs

Section: 147 – Infringement of patents

Section: 148 – False representations regarding patents

Section: 149 – Unlawful disclosure of information relating to patents

Section: 150 – Infringement of marks

Section: 151 – False representations regarding marks

Section: 152 – Other offences as to marks and trade descriptions

Section: 153 – Offences of bodies corporate

Section: 154 – Interpretation

Section: 155 – False name or initials

Section: 156 – Forging marks

Section: 157 – Applying marks and descriptions

**Section: 158 – Exemption of certain persons employed in ordinary course of business**

**Section: 159 – Watches**

**Section: 160 – Mark how described in pleading**

**Section: 161 – Rules as to evidence**

**Section: 162 – Punishment of accessories**

**Section: 163 – Search Warrant**

**Section: 164 – Costs of defence and of prosecution**

**Section: 165 – Limitation of prosecution**

Under Section 166 of the Code (Prohibition on importation) section 43 of the Customs Ordinance is attracted and limited powers are granted to the **Principal Collector of Customs to enforce sanctions.**

### Jurisdiction

Under Section: 186 (Interpretation) of the Code “Court” means the District Court of Colombo. This was so till 1996 and all Intellectual Property cases were instituted in the District Court of Colombo, which had exclusive jurisdiction. However, since the birth of the ‘Commercial High Court in Colombo’ by High Court of the Provinces (Special Provisions) Act No 10 of 1996 by virtue of First Schedule thereto (Section 3 of the First Schedule) jurisdiction in all proceedings under the Code of Intellectual Property Act, within the Western Province vests with the said High Court, with one appeal to the Supreme Court.

The criminal law remedies are available in the Magistrate Court under which jurisdiction that particular offence is committed.

Therefore, in conclusion it may be noted that the following have the power of enforcement of Intellectual Property Laws in Sri Lanka as provided for by the Code in appropriate circumstances.

1. The Director of Intellectual Property.
2. The High Court Judge of the Commercial High Court of the Western Province.
3. The District Judge of the District Court of Colombo.
4. The Magistrate in the Magistrate Court in the appropriate jurisdiction.
5. The Principal Collector of Customs.

“The works of founders of states, law givers, tyrant destroyers and heroes cover but narrow spaces, and endure but for a little time, while the work of the inventor though of less pomp is felt everywhere and lasts for ever”.

Francis Bacon, quoted in *Mainly on Patents* at Page 1, edited by Felix Liebesny, Butterworths.

***DR. HARSHA CABRAL.***

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**THE INTELLECTUAL PROPERTY REGIME IN SRI LANKA**  
**AND ITS NEW TRENDS**

**Introduction.**

Intellectual Property as a concept compasses a set of legally enforceable rights emanating from intellectual creations, i.e., creations of the human mind. The law relating to intellectual property concerns such creations and their protection and management. Intellectual property is considered to be a form of property, with some unique features of its own. It shares several of the characteristics associated with real and personal property. For example, intellectual property is an asset and has a monetary value. It can, like any other form of property, be owned, transferred, sold or licensed. The proprietor of intellectual property has the right, subject to certain restrictions, to use and alienate his intellectual property and to restrain others from encroaching upon his rights. Intellectual property is a kind of intangible property as it may not be identified or defined by its own physical parameters. However, to be protectable, it must be expressed in a discernible form or way. Intellectual property is traditionally divided into two sections, namely, industrial property and copyright. Industrial property embraces the rights relating to areas such as inventions, industrial designs, marks and protection against unfair competition. The rights relating to literary and artistic works fall under the category of copyright while the rights relating to performances of performing artists, phonograms and broadcasts are called related rights.

The introduction of the western concept of intellectual property to Sri Lanka occurred during the British colonial rule. The British Inventor's Ordinance of 1859 was made applicable to Sri Lanka and the first Sri Lankan patent was granted on January 12, 1861. This law was replaced by the Patents Ordinance of 1906, which was purely based on the English Patent Law. The English Law of Trademarks was introduced to Sri Lanka in 1888 under the Ordinance No. 14 of 1888 and the first trademark was registered on 1st January, 1889. The Merchandise Mark of Ordinance of 1889 (chapter 151) made provisions relating to fraudulent marks on merchandise. The Trademarks Ordinance (Chapter 150) of 1925 which was enacted in line with the English Trademarks Ordinance of 1919 replaced the Ordinance NO. 14 of 1888. The Design Ordinance (Chapter 153) which provided for the registration of designs was passed in 1904. The English Law of Copyright was applied per se in Sri Lanka including the English Copyright Act of 1911. A statute called the Copyright Ordinance was enacted in 1912 to supplement the said English Copyright Act of 1911. There were some other statutes in existence in Sri Lanka relating to intellectual property such as the Patents, Designs, Copyright and Trademarks (Emergency) Ordinance (Chapter 157) and the Patents, Industrial Designs and Trade marks (The Neuchatel Agreement) Ordinance (chapter 156)

**The Present Regime.**

An effective system of Intellectual Property became a pressing need in the recent past, especially in the context of the liberalized economic policies of the country.

Consequently, the present Intellectual Property regime including law and administration as provided in the Code of Intellectual Property Act No. 52 of 1979 (which is hereinafter referred to as "the Code") was established.

The Code was enacted to revise, consolidate, amend and embody in the form of a Code, the law relating to copyright, industrial designs, patents, marks and unfair competition and to provide for better registration, control and administration thereof and for matters connected therewith or incidental thereto. It is divided into eight parts. They relate to administration, copyright, industrial designs, patents, marks, trade names and unfair competition, offences and penalties and miscellaneous (which includes application to and proceedings before the Director and the Court and the Minister's power to make regulations, the Intellectual Property Advisory Commission and the Intellectual Property Fund).

Five amendments have been so far introduced to the Code by the Code of Intellectual Property Act Nos. 30 of 1980, 2 of 1983, 17 of 1990, 13 of 1996 and 40 of 2000.

#### Administrative System

The Code provides for some fundamental matters relating to the administration of intellectual property including the establishment of a new Intellectual Property Administrative System. An Intellectual Property Office named "the Registry of Patents and Trademarks" was for the first time in Sri Lanka, established in 1982. The Registry of Patents and Trademarks was renamed "the National Intellectual Property Office of Sri Lanka" (NIPOS) by the provisions of the Code of Intellectual Property (Amendment) Act No. 13 of 1997. This Office is headed by an Official called "the Director of Intellectual Property" whose functions relating to Industrial Designs, Patents and Marks are quasi judicial in nature and subject to appeal to Court. The Office of Director of Intellectual Property is therefore judicially autonomous.

#### Objects of Intellectual Property protected under the Code.

The Code offers protection to the rights relating to inventions, trademarks and servicemarks, industrial designs and literary and artistic works. In addition, it protects trade names and provides for the protection against unfair competition.

#### *Patents.*

Patents are granted for patentable inventions which may be, or may relate to, a product or a process in a field of technology. An invention is patentable if it is new, involves an inventive step and is industrially applicable. The following, notwithstanding that they are inventions within the legal definition, are not patentable: discoveries, scientific theories and mathematical methods; plant or animal varieties or essentially biological processes for the production of plants or animals, other than micro-biological processes and the products of such processes; schemes, rules or methods for doing

business performing purely mental acts or playing games; methods for the treatment of the human or animal body by surgery or therapy, and diagnostic methods practised on the human or animal body.

The right to a patent belongs to the inventor or inventors. An invention made by an employee or pursuant to a commission belongs to the employer or to the person who commissioned the work provided that the parties have not agreed otherwise. A patent is valid for 15 years after the date of grant. After two years of the grant, the patent must be renewed each year until the expiration of the said period of 15 years.

#### *Industrial Designs.*

A design is protected if it is new and not scandalous or not contrary to morality or public order or is not likely to offend religious or racial susceptibilities. Any composition of lines or colours of any three-dimensional form, whether or not associated with lines or colours, that gives a special appearance to a product of industry or handicraft is deemed to be an industrial design. A new industrial design means an industrial design which had not been made available to the public anywhere and any time whatsoever through description, use or any other manner before the date of an application for registration of such industrial design or before the priority date validly claimed in respect thereof. The right to obtain the registration of an industrial design belongs to its creator or his successor in title. A design created by an employee or pursuant to a commission belongs, unless otherwise agreed by the parties, to the employer or to the person who commissioned the work as the case may be. The registration of a design is valid for a period of five years and renewable for two more consecutive periods of five years.

#### *Marks.*

A mark means a trademark or servicemark. A trademark means any visible sign serving to distinguish the goods of one enterprise from those of other enterprises whereas a servicemark means any visible sign serving to distinguish the services of one enterprise from those of other enterprises. The exclusive right to a mark under the Code is acquired by registration. The registration of a mark may be granted only to the person who has first fulfilled the conditions of a valid application or who can validly claim the earliest priority for his application. The grounds of non-registrability on objective grounds and third party rights which include descriptiveness, non-distinctiveness, intrinsic and extrinsic deceptiveness, violation of the provisions relating to unfair competition, indication of source or appellation of origin and contravention of morality or public order are common to many jurisdictions. The registration of a mark expires after a period of ten years from the date of registration. The registration may be renewed for consecutive periods of ten years.

The Code does not totally deny the protection of unregistered marks. The use of a mark, even though it is not registered in Sri Lanka may play an important role in safeguarding the interests of the owners of such mark. Section 142 protects the unregistered marks within the framework of unfair competition.

### *Trade Names.*

A trade name, which means the name or designation identifying the enterprise of a natural or a legal person, is protected in Sri Lanka whether or not it is registered.

### *Protection against unfair competition.*

The concept of unfair competition is a new addition to the legal system of Sri Lanka. The Code while offering the legal protection against any act of competition contrary to honest practices in industrial or commercial matters sets out a list of acts of unfair competitions, which is not exhaustive, including all acts of such a nature as to create confusion by any means whatsoever with the establishment, the goods, services or the industrial or commercial activities of a competitor. As Fernando J. observed in the *Sumeet Research and Holding Ltd.*, case it is sufficient if what was done was in fact unfair in relation to the real competitor, whoever he was.

In term of section 142(3) of the Code, any person or association of producers, manufacturers or traders aggrieved by any act of unfair competition may institute proceedings in court to prohibit the continuance of such act.

### *Copyright & related rights.*

The rights of the authors of original literary, artistic and scientific works are protected under copyright. The Sri Lankan Courts have held that the originality relates to the expression of thought and that the expression need not be original nor in a novel form.. The only requirement is that the work must not be copied from another work and it must originate from the author. What is protected under copyright is not the idea but the manner in which the idea is expressed. The law does not confer protection to a hoarder of facts as well. The Code enumerates a list of works protected as literary, artistic and scientific works including writings, audio-visual works, musical works, works of drawing and painting, photographic works and works of applied arts. A recent amendment introduced to the Code has included computer programs as a literary work in the list of protected works.(The Code of Intellectual Property Act (amendment) No. 40 of 2000) The list is not exhaustive. The derivative works such as translations, adaptation or other transformation of protected works, collections of works which constitute intellectual creations and works derived from Sri Lanka folklore are also protected as original works.

A work is protected automatically by operation of law. Registration or any such other formal requirement does not exist in Sri Lanka. Copyright protection in Sri Lanka extends to a wider area covering;

- (a) works of authors who are nationals of, or have their habitual residence in Sri Lanka.
- (b) the works first published in Sri Lanka.
- (c) all works, by virtue of treaty entered into by Sri Lanka are to be protected as well as Sri Lanka's folklore.

The law also recognizes certain statutory limitations to copyright including "fair use" which covers the areas such as the use of copyright works for educational and research purposes and non commercial private use.

The concept of related rights embraces the rights of the performers, producers of sound recordings and broadcasting organizations. The Code makes provisions only in respect of the rights of the producers of sound recordings.

#### Protected Rights.

The owner of a patent has, subject to certain statutory restrictions, the exclusive right to exploit the invention, to assign and transmit the patent and to conclude licence contracts. Any of the acts referred to above cannot be performed without the consent of the owner of the patent. The registered owner of an industrial design has the exclusive right (a) to reproduce and embody such industrial design in making a product, (b) to import, offer for sale, sell or use of a product embodying such industrial design, (c) to stock a product embodying such industrial design (d) to assign and transmit the registration and (e) to conclude licence contracts. The registered owner of a mark has, subject to relevant statutory provisions, the exclusive right to use the mark, assign or transmit the registration of the mark and conclude licence contract. The third parties are precluded from the acts such as any use of a mark or of a sign resembling it in such a way as to be likely to mislead the public. The Code also protects both economic rights and moral rights of the authors of literary, artistic and scientific works. The economic rights include the right to reproduce the work, to make a translation, adaptation or any form of transformation of the work and to communicate the work to the public whereas the moral rights encompass the right to authorship and the right against distortion. The economic and moral rights are generally protected during the life of the author and for 50 years after his death.

#### License Contracts.

The registered owner of a patent or design can enter into a contract, which is called "licence contract" by which he grants to another person or enterprise a licence to exercise his rights to the patent or the design. The owner of a mark can grant by way of a licence contract, a licence to use the mark for all or part of the goods or services in respect of which the mark is registered. The owner of copyright has the right to grant licences to exercise his economic rights to the work.

#### Renunciation and Nullity.

The registered owner of a patent, mark or design may renounce or surrender the registration by declaration in writing signed by him or on his behalf and submitted to the Director who will, on receipt of the declaration, record it in the Register and publish the same in the Gazette. The Court has power to declare the registration of a patent, design or mark null and void on any of the grounds as declared by law.

### Assignment and Transmission.

The application for registration or the registration of a patent, mark or design may be assigned or transmitted. The owner of copyright can transfer his economic rights and not the moral rights.

### Priority.

An applicant for registration of a mark, industrial design or patent can claim priority of an application earlier made in a convention country under the Paris Convention for the Protection of Industrial Property.

### Infringement and Enforcement.

The Code recognizes a series of statutory offences involving the infringement of intellectual property rights. These offences are declared to be cognizable and bailable within the meaning of the Code of Criminal Procedure Act No. 19 of 1979. Infringement of Copyright, industrial designs, patents and marks, false representation regarding industrial designs, patents and marks and unlawful disclosure of information relating to patents are some of such offences. The infringer is liable to be punished with a fine or imprisonment or both.

Such infringement may also result in civil litigation whereby the infringer may be restrained by an injunction and ordered to pay damages to the affected party. Importation of goods in violation of the rights protected under the Code is prohibited and governed by the provisions of the Customs Ordinance.

Some attempts have been recently made to streamline the civil litigation system in intellectual property by establishing a special court for intellectual property and simplifying the appellate process. Under the Code only the District Court of Colombo had the first instance civil jurisdiction over intellectual property. In terms of the High Court of the Provinces (Special Provisions) Act No. 10 of 1996, the High Court of the Western Province now exercises the first instance jurisdiction over intellectual property. The appellate process is simplified by permitting to challenge the orders or decisions of the High Court of the Western Province only in the Supreme Court.

### International Obligations.

Sri Lanka has been a member of several international conventions and treaties on Intellectual Property. They are the Paris Convention for the protection of industrial property (since 1952), The Madrid Agreement for the repression of false or deceptive indication of source on goods (since 1952), The Nairobi Treaty for the protection of Olympic Symbol (since 1984), The Patent Cooperation Treaty (since 1982), The Berne convention for the protection of literary and artistic works (since 1959), the Universal Copyright Convention (since 1983), The Convention establishing the WIPO (since 1979),

the Agreement on TRIPS under WTO System (since 1995) and the Trademark Law Treaty (since 1996).

### **Towards the future.**

It has become necessary to overhaul and streamline the Intellectual Property regime to make it ready to face the challenges posed in the modern technological environment and current knowledge based activity. The possible new trends in the intellectual property regime in Sri Lanka take different forms. They may be roughly categorized as follows for convenience.

#### **I. Corrective Measures .**

Several provisions of the Code need reconsideration and corrective measures. For example, the law of copyright needs to be totally restructured as the existing provisions are outdated and inadequate in the present context. An industrial design is registered without substantive examination. This has facilitated fraudulent activities creating some unwarranted problems for the genuine creators and owners of industrial designs. It is thus necessary to consider whether the law relating to industrial designs needs improvement.

#### **II New norms.**

The introduction of new norms to the Intellectual Property Law may occur mainly under the TRIPS Agreement.

Both industrialized and developing countries have entered the 21st century with somewhat uniform law of intellectual property as provided under the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) under Uruguay Rounds of Trade Negotiations. Being a party to the agreement on TRIPS Sri Lanka is required to change the law in line with its stipulations.

The legal norms covering the following areas have to be newly introduced to the Sri Lanka law under the TRIPS Agreement.

##### **(a) *Copyright & Related Rights.***

The law relating to copyright protects the interest of creators of original literary and artistic works by giving them property rights over their creations whereas the law of related rights or neighboring rights protects the legal rights of persons, natural or legal, who either contribute to making such creative works available to the public or produce works which show creativity or technical and organizational skill sufficient to justify recognition of a kind of property right. The term related rights embraces three kinds of rights-rights of the performing artists, rights of the producers of sound recording and the rights of broadcasting organizations. As mentioned above the existing Sri Lankan law on copyright appears to be not comprehensive enough and therefore needs reconsideration

and improvements covering inter alia the recently emerged areas in the light of information technology. New provisions have to be made in respect of the related rights.

*(b) Undisclosed Information.*

The protection of undisclosed information - technical information related to manufacture of goods or provision of services or business information which includes the internal information which an enterprise has developed so as to be used within the enterprise, is receiving world-wide recognition. Undisclosed information is protected if it

- (a) is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;
- (b) has commercial value because it is secret; and
- (c) has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.

*(c) Layout Designs of Integrated Circuits.*

An integrated circuit means a product, in its final form or an intermediate form, in which the elements, at least one of which is an active element, and some or all of the interconnections are integrally formed in and/or on a piece of material and which is intended to perform an electronic function.

A layout design is synonymous with "topography" and means the three-dimensional disposition, however expressed, of the elements, at least one of which is an active element, and of some or all of the interconnections of an integrated circuit, or such a three dimensional disposition prepared for an integrated circuit intended for manufacture.

*(d) Geographical Indications.*

A geographical indication, like Ceylon Tea, is generally defined as an indication which identifies a good as originating in a territory, region or locality where a given quality or other characteristics of the good is essentially attributed to its origin. Such geographical indications must be protected to prevent the use of such indication which would mislead the public as to the geographical origin of the goods. The existing Sri Lankan law does not protect such indications and therefore the introduction of new provisions is required.

*(e) Protection of New Plant Varieties (Breeder's Rights).*

In terms of the provisions of the TRIPS Agreement, Sri Lanka is bound to protect new varieties of plants (breeder's rights) either by patents or by an effective sui generis system or by any combination thereof. The existing patent law of Sri Lanka prohibits the patenting of plants. The Acts of 1978 and 1991 of the International Convention for the Protection of New Varieties of Plants (the UPOV Convention) establish minimum standards for the protection of plant breeder's rights. The protection is accorded to plant varieties that are distinct, novel, uniform and stable. The standards of protection under the UPOV principles are lenient than those of under the patent system. The plant breeder's right will also be a useful mechanism for the countries that are not willing to grant patents for plants and other living organisms. However, the 1991 Act of UPOV has introduced certain restrictive principles in several areas such as farmers' privileges.

*(f) Rental Rights.*

The concept of rental rights is another new area which needs attention. Under the TRIPS requirements, Sri Lanka is bound to introduce legal provisions giving the authors and their successors in title the right to authorize or prohibit the commercial rental to the public of original or copies of their copyright works at least in respect of computer programs and cinematographic works.

*(g) Other Areas.*

There are some other areas of the existing law which require changes under the TRIPS Agreement. For example, the valid period of a patent which is at present 15 years from the date of grant must be made minimum of 20 years from the date of application for the patent.

*(h) Enforcement.*

Enforcement of Intellectual Property Law is another area which needs constructive attention. The recent attempts to introduce somewhat expeditious enforcement mechanism as provided in the High Court of the Provinces (Special Provisions) Act have failed to achieve the desired objectives. The delay and cost of litigation is counter productive in the process of socio-economic development. Thus, the existing enforcement mechanisms, both civil and criminal, should be re-organized. New provisions are required to promote counter measures by customs against exportation and importation of goods in violation of intellectual property rights.

*(i) Some domestic requirements.*

It has become necessary to introduce certain new norms mainly in order to rationalize the administration of Intellectual Property regime. For example, a better mechanism for the collective administration of copyright and reorganization of the profession of Intellectual Property Agents are crucial requirements in the today's context.

## **New and Emerging Issues.**

The development of Intellectual Property Law is closely associated with the development of human creativity in general and the development of technology in particular. As a result, fast emergence of new issues in the law is a constant process and common occurrence. Some of the newly emerged or emerging issues which demand due attention may be briefly referred to as follows.

### *(a) Information and Communication Technologies.*

New developments in information and communication technologies have given birth to several new issues in intellectual property law particularly in the fields of copyright and related rights. Those developments such as interactive digital networks and digital delivery, databases and computer-generated works have posed many challenges to the law and administration of Intellectual Property. Intellectual Property Rights are also of central importance in maintaining a stable and effective environment for the development of electronic commerce including the issues relating to domain names, trademarks, protection of well known marks and dispute resolution. The advent of new uses of works such as computer storage and retrieval, cable transmission, satellite transmission, reprography, home taping and rental have also resulted in the development of new norms. The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty (both of 1996) have attempted to address some of these issues and to update the international protection of copyright and related rights in response to the challenges posed by digital technology, in particular by global networks such as internet. They contain, inter alia, the provisions which aim at preventing unauthorized access to and use of works such as books, music, songs and films on the internet or other digital networks. Sri Lanka is not a party to these two treaties but the embodied principles cannot be easily ignored. At the same time, many other issues such as protection of audio-visual performances, protection of the rights of broadcasting organizations and protection of data are emerging. It has become critically important today to study new issues and monitor the impact of digital technology, particularly of global networks such as Internet on law of copyright and related rights. In the modern environment of information and communication technologies, the methods of protection and management of rights have become dramatically complicated demanding new solutions.

### *(b) Biotechnology and bio-diversity.*

Biotechnology concerns living organisms like plants and animals and non-living material like seeds and enzymes. Biotechnology and bio-technological inventions will have a significant impact on human life and society in the years to come because they relate mainly to the fields of medicine, food, energy and

environment. The patentability of the inventions in the field of biotechnology is a controversial issue.

The protection of bio-diversity has become another popular subject today. Protection of bio-diversity and the control of so-called bio piracy as well as the use of intellectual property in the protection of rights relating to bio-diversity are some of the issues that have received worldwide attention.

*(c) Traditional Knowledge*

Traditional knowledge may encompass the knowledge held, developed and passed on from generation to generation by a particular nation, community of some time a family. It covers a broader range of subjects, activities and practices such as art, literature, music, crafts and designs, environment, plants, animals, medicine and methods of treatment including rituals and useful properties of fauna and flora relating, inter alia, to medicine, food and food processing. In view of the involved subjects the traditional knowledge has a great scientific and commercial value and therefore is vulnerable to undue exploitation by out side forces mainly those who have financial resources and technological know-how. There were certain reported instances of attempted exportation of traditional knowledge related material from Sri Lanka. The protection of traditional knowledge does not fall within the ambit of the existing intellectual property regime.

The laws relating to various objects of intellectual property recognized under the existing law are not intended or devised to protect traditional knowledge. Traditional knowledge cannot be patented as it is already known and in the prior art. The law of industrial designs will not protect the designs in traditional art and crafts because they are not new as required under the law. The copyright law will not be applicable to the literary and artistic works in the traditional knowledge because they have been in existence for many years beyond the period of time during which the rights of the copyright owners are protected whereas the authors of such works are not known. So are the principles of law of undisclosed information. Traditional knowledge does not fit into the legal framework of undisclosed information which is purely based on private ownership and commercial interests. Certain holders of traditional knowledge, for example in Sri Lanka, do not use their knowledge for commercial purposes at all.

Consequently it has become important to examine carefully how the existing Intellectual Property System can protect the rights of the holders of traditional knowledge and whether new legal norms should be developed. It should be mentioned that national laws of the protection of traditional knowledge would not generate desired results unless the international community is willing to respect traditional knowledge and internationally respected norms and standards are established.

*(d) Protection of Folklore.*

Protection of Folklore and management of rights relating to folklore have drawn the attention of many countries both developed and developing. The development of effective and workable standards for the protection of folklore and mechanisms for identification, management and enforcement of folklore rights are a subject of much importance. There can be links between the protection of folklore and of traditional knowledge and innovations and creations based on traditional knowledge. All these issues need careful and constructive examination. Section 12 of the Code makes provisions for the protection of works of Sri Lankan folklore but they are not very effective mainly due to lack of clarity.

(e) *Intellectual Property and Human Rights.*

Intellectual property rights have become unprecedentedly relevant in the policy making process in various sectors such as trade, culture, investment, science & technology, environment and health. Intellectual Property can be a useful instrument in the development process of any given country but its role in the development process is not free from criticism and challenges. Against this backdrop, the issue relating to intellectual property and human rights is steadily emerging.

The human rights character of intellectual property is referred to in several international and regional instruments such as the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights. For example, Article 27 of the Universal Declaration of Human Rights declares :

"Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

The linkage as well as the possible conflicts between human rights and intellectual property rights are relevant in the areas such as right to culture, right to health, right to equal opportunities and rights relating to traditional knowledge. It may be crucially important to achieve a balance between the intellectual property rights and the rights to development and to benefit sharing in the scientific progress and its application. A constructive debate on these aspects is timely.

### **Concluding Remarks.**

Intellectual Property is today not something in sophistication but a part of life. It cannot be seen in isolation for its relationship to creativity, knowledge, information and economic growth. One of the major differences between developed and developing nations is the difference between success and failure in the creation and use of knowledge. Sri Lanka cannot run the risk of isolation, marginalisation and being left behind the rest of the world in the knowledge-based environment where Intellectual Property regime is an indispensable constituent part. Against this backdrop, the intellectual property regime in Sri Lanka demands constructive and visionary attention of those concerned.

D.M. Karunaratna,  
LL.B. (Hons.), LL.M. Ph.D.  
Attorney-at-Law,  
Director of Intellectual Property of Sri Lanka.

**National Seminar on Intellectual Property Rights (IPR) and Commercialization of Research**  
24 th Friday November 2000 at BMICH, Colombo

Organised by: National Science Foundation (NSF) and Post Graduate Institute of Science (PGIS)  
Co-Sponsored by : ADB project on S&T Personnel Development of the Ministry of S&T

**Programme**

9.00 - 9.15 a.m. Registration

**SESSION ONE - Inauguration -Chair: Prof K.Dahanayake**

9.15 - 9.25 a.m. Welcome Address

*Prof K.Dahanayake, Chairman, NSF & Director, PGIS*

9.25 - 9.35 a.m.

Objectives of the Seminar

*Dr B.Basnayake, Chairman of IPR Committee, NSF*

9.35 - 9.45 a.m.

Introduction to ADB project in relation to IPR and Commercialisation of Research

*Prof K.K.Y.W.Perera, Director, ADB project on STPD*

9.45 - 10.15 a.m.

Keynote Address

*Dr R. Saha, Head, Patent Facilitating Cell, Dept of S&T, India*

10.15 - 10.30 a.m.

Address by the Chief Guest

*Prof R. Arthenayake, Secretary, Ministry of S&T*

10.30 - 10.35 a.m.

Vote of Thanks

*Mr M.Watson, Director, NSF*

10.35 - 10.50 a.m.

Tea

**SESSION TWO - "INTELLECTUAL PROPERTY RIGHTS" - Chair: Mr. M.Watson**

10.50 - 11.15 a.m.

New dimensions of IPR Law in Sri Lanka

*Dr D.M.Karunaratne, Director, NIPO*

11.15 - 11.40 a.m.

IPR issues in Industry

*Prof Tuley de Silva, Consultant, Link Natural Products & Visiting Prof University of Sri Jayaewardenapura*

11.40 - 12.05 p.m.

Enforcement of IP Laws

*Dr Harsha Cabral, Attorney-at-Law*

12.05 - 12.30 p.m.

Commercialisation of Local Inventions

*Dr L.M.K. Tillakeratne, Chairman, Sri Lanka Inventors' Commission*

12.30 - 12.55 p.m.

Case Study by a patent holder

*Mr Donald Gunasekera, Cottage Plastic Industries Ltd*

12.55 - 1.05 p.m.

Discussion

1.05 - 2.00 p.m.

Lunch

**SESSION THREE- COMMERCIALIZATION OF RESEARCH**

Chair: Mr M.J.C. Amarasuriya

2.00 - 2.20 p.m.

Commercialization of Research, Fact or Fancy? The ITI story

*Dr Nirmala Peiris, Head Corporate services Div. ITI*

2.20 - 2.40 p.m.

Commercialization of university research- Constraints and Potential

*Prof U.Samarajeeva, Head, Dept of Food S&T, Univ of Peradeniya*

2.40 - 3.00 p.m.

Realities in commercialization of research in Sri Lanka

*Dr B.Perera, Chairman, Ceylon Glass Co Ltd*

3.00 - 3.20 p.m.

"Technology Development & Commercialisation of Research Findings in Electronics

*Mr N.Kularatne, Director, ACCIMT*

3.20 - 3.35 p.m.

TEA

**SESSION FOUR - GENERAL DISCUSSION**

Discussion Leaders - Prof K.Dahanayake & Dr R. Saha

3.35 - 4.15 p.m.

Discussion

4.15 - 4.30 p.m.

Concluding Remarks

*Prof L.Dissanayake, Head, Dept of Physics, Univ of Peradeniya*

4.30 - 4.35 p.m.

Vote of Thanks - *Mr R.M.W.Amaradasa, Head Scientific Affairs Div., NSF*

# Intellectual Property Rights and Commercialisation of Local Inventions and Innovations

Dr. L. M. K. Tillekeratne  
Commissioner  
Sri Lanka Inventors Commission

## Abstract

With the implementation of the TRIPS Agreement it is extremely important to further the promotion of inventions and innovations at the national level to meet day to day requirements of the nation. It is equally important to protect intellectual property right of such inventions and innovations to prevent them from being misused by patent pirates both nationally and internationally.

Due to the lack of knowledge on the importance of obtaining IP rights for inventions and innovations great deal of local inventions have been commercialised in other countries without paying any Royalty to the inventors.

However, under the new presidential fund set-up for the promotion of inventions by Her Excellency in 1998, financial support is given to patent all award-winning inventions in Sri Lanka since Presidential Award Ceremony held in 1998. In addition to that financial grants are given to make prototype models of the inventions for the purpose of promotion of the invention among entrepreneurs. Funds are also given to start producing export oriented inventions for marketing locally or overseas; specially which are environment friendly and utilise local raw materials for the manufacture.

Soft loans are also given under the Inventions Promotion Fund of the President to expand existing industries to produce and commercialise new inventions, which are important both nationally and internationally.

This objective can be achieved much easily if the "Industrial Incubator System" adapted in Aachen, Germany for commercialising inventions is adopted in Sri Lanka.

**Mr. CHAIRMAN, LADIES and GENTLEMEN,**

1. When I see this distinguished audience and the erudite panel of speakers I am somewhat overawed, because I make no pretensions to being an expert on patent.

In fact I was wondering why I was chosen to make a presentation today. May be it is because, among Sri Lankans, I probably have the most number of patents to my name.

Be that as it may, I need to warn you that I am no speaker but I can tell a story and that is precisely what the **National Science Foundation** wanted me to do.

To tell a story. I shall just do that:

2. My first exposure to the ramifications of patents was when I was under training abroad. I found that my Employers were manufacturing a machine that required two people to start it. One had to crank the flywheel from the backend, the other had to throw the decompressor gear, from the front end. Now, for this purpose, the Company had installed a complicated device consisting of wheels, sprocket wheel, shafts, cams, springs, rocker arms etc.,

It occurred to me that this complicated contraption could be simplified by just using a chain with a cotter pin and loose fitting nut, at negligible cost and without the need for retooling. It also saved the manpower requirements by half.

I made this simple device and fitted it to the machine replacing the existing complicated contraption.

This device of mine was demonstrated to the senior staff who acknowledged that it was an eminent success and no one had any criticism to make.

I then sought the assistance of the Company to have my device patented. To my surprise the Company point blank refused and said that the Company can only consider a bonus payment, which amounted to a fraction of what the Company would save. I said that this was in no way acceptable to me. I was thoroughly disillusioned but being the only Asian in the Company, was helpless. The amount that the Company has saved over the years boggles the imagination.

3. Since then, I have filed Seven Patents –

3.1 First was the Elasto advertisement at the Buller's Road/Galle Road Junction which I am sure all of you have seen. The inspiration for this invention was quite accidental. I first conceived this idea of using reflecting discs loosely hung on pins to depend on the breeze to energize it to give a shimmering effect. I constructed a pilot model. Putting the model to trial I asked a worker to hold the face of the model to the breeze. However shimmering occurred only intermittently, when there was sufficient velocity of breeze. In doing this, the worker accidentally and unintentionally shook the model and it resulted in a more spectacular and rhythmic shimmering effect. This observation inspired me to devise a system of mechanical forced vibration to be independent of the vagaries of the breeze. The novelty and effectiveness of the vibration board, doubled the sales of my product in one month. This patent was not infringed, probably because no one else knew the impact it had on my sales. The patent expired in 1970. This patent was not copied even after the expiry of the patent.

3.2 The next patent was to make Cinema Slide advertising more spectacular. Cinema Slide advertising had no motion. They were stills. I devised a system of introducing motion into the slide. This patent was infringed within a few days. However on complaining to the patent office, corrective action was taken and this patent was never infringed again.

3.3 The third patent was for weaving material for chairs. Originally natural cane was used but was in short supply and plastics took over. The plastic product which was of the same colour as natural cane was a failure.

I discovered that this was caused by ultra violet light. On complaints made to the manufacturers their response was to use Black cane. A foolish response, because clearly, Black cane was aesthetically not acceptable.

I got over the problem by coating the Black cane on one side with a superficial layer of a colour acceptable to the end users through a process of dual extrusion. This patent of dual extrusion with Black on one side and Beige on the other was infringed only after 13 years, one year before the expiry of the patent. Obviously, going to Courts at the tail-end was not feasible because of long drawn out Court procedures in this Country. This is a weakness of our patent system

- 3.4 The 4<sup>th</sup> patent was with regard to dipped rubber products. The process of dipping was time consuming and expensive. Manufacturing had to be done on a piece by piece or batch by batch basis, I devised a licking process to replace the dipping process by using a moving aluminium belt.

Because the process was a continuous one, it was more cost effective and also gave scope for increased production. In patenting this process, I took the precaution of not incorporating in the patent a crucial element, to prevent infringement. This process gave me the edge over competitors and gave scope for a lucrative export industry. Some of the products of this invention are tourniquet bands, rubber strips etc., making physiotherapy and fitness procedures cheap world-wide. Some of these can be carried in the pocket. Nevertheless after about ten years the confidentiality of the process was cracked by unscrupulous competitors buying over some of my employees. So in this case patent proved futile.

- 3.5 The 5<sup>th</sup> patent was a better process for separating the bark component in panel scrap rubber. The existing method was to separate the bark element by extensive washing on a grooved two roll mill. With water pouring into the nip. This was a time-consuming, messy, unhygienic and worker unfriendly operation. I patented a process where the panel bark scrap rubber was soaked over-night and passed through 2 smooth rollers, rolling at very high even speed and with a tight nip.

Thereby the bark was ground and incorporated into the rubber as a filler. This filler reduced the cost of the compound considerably. The end product was described by me as Micro Bark. This material is used by for rubber compounds, especially for rubber soling and has reduced the cost of footwear manufacture.

- 3.6 The 6<sup>th</sup> patent was a composite board consisting of 2 layers. The 1<sup>st</sup> layer was about 1 mm thick and consisted of dry rubber and cotton waste. (Usually fly waste milled together with the necessary rubber chemicals for vulcanising and antioxidants). The other layer is a mixture of rubber and waste polythene mixed together in a hot extruder and made into half mm layer by passing through a calender. This layer is printed with a suitable design with matching colours.

The layer with cotton waste is buffed for better adhesion to the straps and soles of sandals, with Neoprene cement.

Although I have many patents to my name, only a few have export potentials.

4. In Sri Lanka the patent system is like the Curate's egg Good in parts

My experience is that I have been able to register 08 patents in a period of about 40 yrs without too much of a hassle.

The only patent of mine that was infringed was the Cinema Slide in Motion, which I have shown you. As I said before, on complaining prompt action was taken by the Patent Authority and infringement was stopped.

On the downside the foremost, is the resort to Law remedy, a time consuming and also expensive exercise. Furthermore, it is not every Lawyer who will handle a patent-infringement brief. To compound matters, there is the Laws Delays, a canker that is getting worse everyday. No patent holder will resort to Court 3 to 5 years before the patent expires, because by the time the case is concluded the patent would have run its course.

5. Sadly, in Sri Lanka, the number of applications for Patents by Sri Lankans is not commensurate with the number of centres of Higher and Technical Education. While the Sri Lankans applying for patents is 100 per year, in Japan it is around 400,000, of which a third are successful. It appears that Sri Lankans are not Invention-oriented and a greater awarness of the protection that the patenting system affords could serve as a small stimulus?



**DONALD GUNASEKERA**

16<sup>th</sup> November, 2000

**National Seminar on 'Intellectual Property Rights (IPR) and Commercialisation of Research**  
 Organised by the National Science Foundation (NSF) and Post Graduate Institute of Science (PGIS)  
 Co-Sponsored by the ADB project on S&T Development of the Ministry of S&T  
 24 November 2000

**Session on Commercialization of Research**

*Presentation review*

## COMMERCIALIZATION OF RESEARCH, FACT OR FANCY? – THE ITI STORY

**Nirmala M. Pieris**  
*Industrial Technology Institute (ITI), Sri Lanka*

### **Introduction**

The Industrial Technology Institute (ITI) is a statutory body that came into existence in April 1998 by virtue of the Science & Technology Development Act No. 11 of 1994. The ITI is the successor to the Ceylon Institute of Scientific & Industrial Research (CISIR), which was established in 1955 on the recommendation of a World Bank mission of 1952. The role of the CISIR was to support industrial development of the country by scientific and industrial research and provision of technical services and training. Over the years, the CISIR expanded its scope and range of activities but became more focused on in house R&D projects, the results of which, were in most instances not relevant to industry and thus had hardly any chance of commercialization. This resulted in some feeling of detachment and lack of real assistance to industry in spite of the relationship the institute had with industry with its reputation as a well-accepted testing laboratory.

Realizing this shortcoming, the Governing Board of the institute in the late 1980s decided to make the institute demand oriented and more responsive to the needs of industry. Subsequently, several studies were undertaken and in early 1991, the CISIR reformulated its R&D policies and strategies to suit the new demands from industry and other economic sectors. The new policy underlined the need for the CISIR to be market oriented and demand driven with respect to its R&D and services functions. Thus a restructured CISIR came into being in 1993 with new objectives to achieve this end.

### **Research vis-a-vis Research & Development**

As a result of this reorganization process, the in-house research programs that were previously carried out with financial support from the institute came to a virtual halt. All institute initiated research programs that were to be undertaken hereafter, were required to obtain a funding commitment from local or foreign funding sources with the institute supporting only one to two projects that were supposedly of true national importance.

At the same time, the institute encouraged demand driven R&D programs that were requested by industry. These projects whilst generating much revenue, were also definitely conforming to the need for commercialization. In most instances the cost of this work was fully recovered from the client and in some cases even generated a revenue surplus. This was not true with the funded programs, where in a majority of instances only the day- to-day costs of the project were being recovered with the institute having to incur the major expenditure for staff time and overheads.

The institute also ventured into joint programs with private sector industry in a bid to enhance commercialization prospects. However these programs were not entirely successful due to various reasons.

### **Other demand oriented activities**

Whilst these programs were in progress, the institute also carried out several other demand oriented activities. These included analytical testing, measurements, calibration and repair of equipment, engineering services, training of technical personnel, consulting as well as the provision of information services. These services were required by the industry and other economic sectors for quality assurance of products and processes, management of the environment, trouble shooting in industry, import export

conformity etc. The services generated a good percentage of the institute revenue that is considered a dire necessity due to the fast depleting funding from Government sources.

### **Commercialization, fact or fancy**

The institute presently in its eighth year after restructuring continues with all the activities as described above and is in a situation where it is on two sides of a scale with respect to its research programs. On one side, is the research that is in actual 'fact' demand driven and totally financed by industry and on the other, auguring on the 'fancy', hoping to be demand driven after a process of searching for demand at the completion of the research program that has been partly or totally funded by a donor agency.

The question however is, can we in a developing country such as Sri Lanka afford to spend time and resources on such research, which may or may not have prospects of commercialization in the immediate future? There is no doubt that this research has long term benefits by way of accumulation of expertise as well as for building a knowledge base that obviously will come in useful at a future date.

### **Prospects for commercialization**

With respect to the so-called prospects for commercialization, it is clear that very few enterprises in the country will utilize the fruits of research and follow it up with successful commercialization. The obvious reason for this would be that the research that is initiated by the ITI is not viable or relevant for commercialization. This no doubt is one side of the coin, but there is also another side where this research can be considered commercializable.

Many reasons can be attributed for there being no takers for this industry relevant research. The most important of course, is that the majority of Sri Lankan enterprises with their meager resources similar to those in other developing countries are not willing to gamble with new, untested developments. Even large industries with unlimited finances may prefer to obtain research developments from their international collaborators or from other foreign sources.

In instances where commercialization has taken place, the research has at most times been taken up for self-employment ventures, by small industrialists or by NGOs all of whose very sustenance is questionable.

In the case of R&D that is demanded by industry, it is definitely a different story. A story of 'almost for sure' commercialization. The demand obviously arises when the institute can deliver a package that is totally cost effective from the point of view of the user and is as good, or better than what the user can obtain from another local or a foreign source. Of course, the institute also has to generate the results within a reasonable time frame and must have proven expertise in the area of activity. Even though this can be considered an ideal situation with respect to research that is to be carried out at the ITI, experience has proved that this demand has so far arisen only in certain specific areas of the institute's activities.

### **Disadvantages to commercialization**

The ITI is further disadvantaged with respect to the commercialization of research, in the scenario where successive governments in their quest for promotion of industrial development have provided various concessions, exemptions and fiscal incentives to the industrial sector of the country. Some schemes presently in operation are those that are afforded for advanced technology, thrust industries, export oriented industries, for regional industrialization and for the textile, gem & jewellery and computer software sectors.

There is also the situation, where 'turn key' technologies are available from foreign sources that in most instances can quite easily be adapted to the local situation. This is against the situation where a bench scale process from the ITI needs further infusion of finances for stepping up to a pilot scale, then to a semi-commercial scale and finally for the development of the commercial scale package. ITI and other similar institutes have therefore to compete with all above factors to have their research commercialized. The question then is, why is it that no concessions, exemptions or incentives have been provided by the state to local industry for use of local research? Why is it that organizations providing financial facilities such as the commercial and development banks and the venture finance companies give no special preference or concessions for use of local research? Is it a lack of strategy from the institute itself or is it that the capabilities of institutes such as the ITI are under estimated and not recognized?

## Focus of presentation

The presentation will touch upon the areas of research that have been undertaken by the ITI in the recent past and then discuss some successes and failures of commercialization of this research and critically examine reasons for such failure or success. The presentation will also endeavour to examine some of the constraints that are encountered and have to be overcome in this vicious line to commercialization as well as the several other questions that have been raised previously in this review.

Some of the other issues that will be covered would be the question of how important it is to patent research results? From the ITI experience it is clear that most of the patents that have been granted have never been commercialized. This obviously means that all ideas are not worth patenting, as it sometimes does not do anything for the product or the process other than having a patent in the name of the researcher. It is therefore clear that patenting research results is only worthwhile, primarily if the chances of someone trying to copy and sell the particular product or process is high. This in turn depends on factors such as cost of production, size of market and likely financial returns. Naturally, in instances where the institute has linked and has co-operation of a large company it may be beneficial to attempt to patent particularly if the market for the product that is to be manufactured is large and there is considerable profit to be made. The presentation will provide details of the institute patents and their positions with respect to commercialization.

## Conclusion

In conclusion, it can be said that commercialization of research is a difficult and steep process with many travails along the way. These can only be overcome if the right mix of requirements is in place from the very beginning where the research idea is conceived right up to the point of commercialization and conversion to a marketable product. So obviously commercialization of research is not a just a fancy story that can be expected but it is in fact a process for which total support is essential from several quarters, a fact that has hardly been recognized by all those who question the capability of commercialization of research by the ITI.

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Extract from the S&T indicators Part IV

NARESA

"Constraints and opportunities for scientific research in Sri Lanka"

2.4.1 Constraints in Commercialization of Research Findings in Natural Products Chemistry - A Case Study

During the past few decades Sri Lankan scientists are estimated to have screened more than 1000 species of plants for various classes of biologically important secondary metabolites such as alkaloids, steroids, terpenoids, plant phenols and pheromones. In about 50 species of higher plants, active principles and commercially useful natural products have been investigated. Although Sri Lankan researchers have been in the frontier of natural products chemistry, in the past their general thrust in research had been to widen the horizons of knowledge on the range and character of plant and animal metabolites, rather than to exploit the exquisite and unique qualities of these constituents in commercial terms. However, in recent times with the accumulation of knowledge in active ingredients, especially of those which have been traditionally identified with specific medicinal value, and the availability of new analytical tools and screening techniques, researchers have turned to pharmacognosy.

The search for biologically active constituents in materials of plant and animal origin involve chemical and physio-chemical analytical processes, broadly referred to as screening. During the initial phase of the screening of materials for biological activity, a laborious process involving extraction, fractionation, isolation, purification and identification takes place. Sophisticated instrumentation now facilitates fairly quick identification of the biologically active principles. However, most biologically active ingredients are present only in minute quantities, and hence demand a high degree of attention and care in the isolation process. A well known example is the extraction of the anti-leukaemia alkaloid vincristine which is known to be present only to the extent of 20 mg per metric ton of the dried leaves of *Catharanthus roseus*. This would mean that to obtain one gram of vincristine, one would have to work with 50 tonnes of leaf materials (75).

Natural products chemists seeking to isolate and identify active principles in biological material are also often frustrated by the difficulty of confirming the structure and biological activity of the isolates. Currently easily applicable techniques are available mainly for the determination of antibiotic and anti-cancer activity. The limited availability of simple bio-assay facilities in Sri Lanka have been a limiting factor in developing marketable products. Most of the laboratories have facilities for *in vitro* assays, but only some limited and less precise facilities for *in vivo* assays. The range of *in vivo* assays are not only limited, but are also short of the rigorous conditions necessary for determining the specificity of activity. As a result of this situation much effort is dissipated in dealing with physiologically inert natural products.

Currently many of the likely active ingredients are forwarded to reputed international laboratories for structural determination and identification of the specificity in activity. This procedure is beset with hazards. There have been numerous instances of the loss in transit of material prepared with great care and attention. Sometimes even if the material finally reaches the reference laboratory safely, there is no guarantee that it will receive the attention that is required to get an accurate finding. Thirdly, the final interpretation of the results leaves some

element of doubt in the minds of the researcher as to the completeness and truthfulness of the interpretation.

Some Sri Lankan natural products chemists carry out studies in collaboration with well known multi-national pharmaceutical corporations, which assist them with funds for research, and access for high precision and broad spectrum screening in their reference laboratories. Although many potentially responsive extractants produced by these scientists have been screened by these pharmaceutical laboratories, thus far the results have been frustratingly negative. Here again researchers are somewhat confused and concerned about the results provided, since the interpretations are often unintelligible or vague. There is some doubt all the time, as to whether some vital information is not truthfully revealed in the interpretation of such results. However, the third world scientist has no choice in this situation, but to continue with his toils hoping for better times.

In a recent study, a group of researchers from the University of Peradeniya discovered that the yield of a plant ecdysteroid could be obtained in yields more than 6-fold greater than the procedure currently used. This phytoecdysteroid, well known to be active against the larvae of the European corn borer *Ostrinia nubilis*, was also found to be active against the groundnut aphid. It also had moderate insecticidal and spermicidal activity(76). The researchers demonstrated that this active principle could be produced according to required specifications at one sixth the current (1989) price which was marketed by a Swiss firm at 13.00 Sw.Fr. per milligram, and by an American Company at US \$ 12.00 per milligram.

Accordingly the University researchers invited quotations from well known British, German, Swiss and American drug firms for the sale of this constituent. Strangely however, none of these firms showed any interest in the purchase of this active steroid from the cheaper source, possibly because they had already linked up with prestigious laboratories to purchase it at predetermined prices(77).

This is an example where scaling-up or pilot plant studies were not of any concern, yet the effort of these researchers to market a process technology in the international market was aborted by circumstances beyond their control. Thus regardless of the quality of research, developing country scientists face many impediments in trying to commercialize a new found product or process technology.

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**REALITIES IN COMMERCIALISATION OF RESEARCH IN SRI LANKA**  
by  
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Manufacturing and construction industries are an integral part of our economy. Together they are providing nearly 1,000,000 direct employment to our people and another large number as indirect employment. Both these sectors contribute 24% to our GDP in 1999.

Our industry is now facing a major challenge under globalisation in an open economic environment. With all protections removed and market forces coming into control any product will survive if and only if it could be marketed at the lowest possible prices whilst the product being of high quality.

Under this set up if our industry is to survive they invariably will have to

- (a) Enhance the economies of scale
- (b) Bring in continuous improvements in productivity and quality

Commercialisation of R&D thus becomes an important part in achieving the above, as the following opportunities are available as a consequence.

**Opportunities**

1. For their very survival industry badly needs continuous improvements both in productivity and quality.
2. Industry needs the services of Scientists and Engineers more than ever,
3. Under globalisation there are great opportunities in nish markets if approached differently through commercialisation of innovatives.
4. Opportunities available in the knowledge based industry - the swing from resource based to knowledge based.

However, these opportunities available are seriously hampered by the 'walls' that surround them.

**Constraints**

1. Private Sector does not want to risk their capital by commercialisation of R&D - Feeling of mistrust - this is mainly due to the inward looking nature of our industries rather than creating the future.
2. Scientists and Engineers involved in R&D distancing themselves from the industry.
3. Lack of marketing capabilities of the R&D institutes.
4. Industrialists being unaware of the capabilities of R&D organisations.
5. Lack of ability to work in groups among the Scientific Community.
6. With merges and take-overs multinationals/large groups bring in their own R&D work to be implemented.

What should we then do to surmount these constraints and grab the available opportunities. Herein there are roles to be played by R&D organisations (including Universities), Industry, Chamber of Industry and Commerce and Government alike.

Some of the important features in this regard are given below.

### Solutions

1. Like in India there should be an organisation/s to identify the commercial viabilities of various R&D projects done annually. Selected projects should be given financial assistance to set up pilot projects. This could then be easily marketed to the industry.
2. Universities and R&D organisations should develop a close rapport with the industrial and commercial chambers.
3. All R&D organisations should either employ or hire the services of a good marketing organisation/person who will market their development work and their capabilities to the industry.
4. A proper system of sharing information among all the Scientific personnel in Universities and R&D organisations must be developed.
5. Authorities must never make the R&D personnel feel that their work is of low priority.
6. Government must grant direct tax incentives to the industry to motivate them to,
  - (i) Invest in R&D in the form of Industry-University joint partnerships
  - (ii) Invest in training and HRD activities