

NA -165

SCIENCE & TECHNOLOGY AND IPR ISSUES :
INDUSTRY AND INVENTION



NA-165

Natural Resources, Energy and Science Authority of Sri Lanka
February 1998

Report of a Workshop

on

**Science & Technology and IPR Issues :
Industry and Invention**

held at NARESA on

22 January 1998

Sponsored and Organised by NARESA through its IPR Cell

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Workshop on Science & Technology and IPR Issues - Industry & Invention

1.0 WELCOME & INTRODUCTION

The workshop commenced with an address by Prof. Priyani Soysa, Director General, NARESA, who welcomed the participants. She referred to the TRIPS Agreement and the Convention on Biological Diversity of 1992 which brought intellectual property rights into focus in relation to biodiversity, biotechnology, plant breeders rights etc. NARESA cannot stand still in the scenario of S&T development and has taken the initiative to form an IPR Cell. The purpose of this workshop was to raise awareness on aspects of IPR.

Dr R.O.B. Wijesekera, Chairman, CISIR, in his remarks, said that this workshop was the first major activity of the IPR Cell, and the second will be to bring out a small booklet that would sensitise our scientists regarding the possibilities of safeguarding IPR.

2.0 TECHNICAL SESSION

2.1 Intellectual property rights - challenges and opportunities

The keynote address on the above topic was delivered by Mr N.R. Subbaram, former Head of the Intellectual Property Management Division of CSIR, India and presently a Consultant to the Government of India.

Mr Subbaram said that in the present scenario scientists cannot afford to be ignorant of the IPR system. The main concerns of the developing countries about the implication of the TRIPS Agreement are (a) the extension of IPR to product protection (Sri Lanka's IP laws already allow this), particularly in the area of pharmaceuticals, and (b) impact on domestic R&D. He was of the view that granting of patents will not necessarily increase the price of drugs. Governments can take other measures to regulate the price of drugs. Articles 7, 8 and 40 of TRIPS should be taken advantage of with respect to licensing practices, so that public interest is safeguarded. It would be necessary for developing countries to frame an appropriate IP policy, and formulate strategies to maximise the benefits from the intellectual capital of the country by stimulating higher levels of innovation, ensuring timely efficient legal protection for the IP, and forging strategic alliances for enhancing the value and volume of IP.

The text of his address is at Annex II.

2.2 Third World Scientists and IPR

Prof. V. Kumar, Professor of Chemistry, University of Peradeniya, in his presentation highlighted some of the problems facing Third World scientists in relation to IPR - international applications for patents is expensive ; there is no guarantee that the patent will result in financial benefit to the scientist, as few patents are exploited commercially ; it is legally expensive to prevent infringement of a patent in a foreign country ; negotiations on royalties would be very difficult without state intervention. He posed the question whether the Third World is dependant on developed countries and transnational corporations for R&D and research success.

2.3 Overview of the pharmaceutical industry in Sri Lanka

Mr H.S.K. Sirisena, Divisional Manager of the State Pharmaceutical Corporation gave an overview of the pharmaceutical industry, which is mainly a formulating industry relying on bulk importation. The quantity of drugs imported per capita was very high in Sri Lanka. Mr Sirisena made a number of suggestions for amending the IP laws while complying with TRIPS, in order to prevent multinational companies from exploiting the situation.

2.4 Herbal medicine industry in Sri Lanka

This presentation was made by Dr U. Pilapitiya, Director of the Bandaranaike Memorial Ayurvedic Research Institute. He said that around 80 small herbal medicine manufacturing units are registered at present. Many herbal medicines are also imported from other countries. Quality control is very important in herbal medicines and this is a big problem. No patent system is used in ayurveda. Traditionally physicians don't divulge the prescription to anybody except someone reliable like one's own son. But hundreds of prescriptions have also been recorded in ancient manuscripts.

2.5 Problems facing the inventor in Sri Lanka

Mr P.N. Nandadasa, Chairman/Managing Director of Flexport (Pvt) Ltd. highlighted the problems faced by the inventor from his own experience in trying to commercialise an invention : Bureaucratic systems and lack of flexibility of the government machinery, lack of support for inventors by way of development funding, difficulty of obtaining funds for prototype testing. He has also faced the problem of confidentiality and delays in MOUs etc. in working with government R&D institutions.

3.0 DISCUSSION

Chairman : Prof. V. Kumar

Various issues were raised by participants and the Chairman guided the latter part of the discussion towards formulation of recommendations which are reported in the following section.

Some of the points raised at the discussion and not incorporated in the recommendations : (a) It is incorrect to assume that all generic products are equally effective. There are known cases where a particular drug is longer lasting and has less side effects than the cheaper alternative generic drug. (b) Patenting of processes and products recorded in *ola* leaves cannot be done as it will not satisfy the novelty criterion, but modifications that stand up to the criterion of "non obviousness" can be patented.

4.0 CONCLUSIONS & RECOMMENDATIONS

- 4.1** Sri Lanka's laws on Intellectual Property Rights (IPR) must ensure the protection of the IPR rights of both Sri Lankans who hold such rights and of foreigners and foreign entities concerned about the unauthorized import and manufacture of goods infringing IPR. As far as the latter is concerned, Sri Lanka like other developing countries, has been under pressure from the international community for improved enforcement of IPR laws. The present punishments for IPR infringement offences appear to be too light and more severe punishments are called for. Better enforcement, it is hoped, will encourage IPR owners to offer their products, especially in the fields of books and computer software, at lower prices to developing countries, once they are assured that the lower priced products will not find their way back into the developed countries and affect markets there.

The Code of Intellectual Property Act No. 52 of 1979 requires amendment not only to meet Sri Lanka's obligations under the Trade Related aspects of Intellectual Property Rights (TRIPS Agreement) but also because there are deficiencies in the Act which need to be addressed. Surprisingly the present Act does not offer protection for Geographical Indicators, an area which is extremely important in order to ensure that the use of the internationally reputed "Ceylon Tea" is restricted to tea produced in Sri Lanka.

The present Act does not provide for an opposition period before the grant of a patent during which period objections could be raised against the issue of the patent. Also there seems to be at present insufficient publicity being given for patents which are being considered or granted. While certain amendments to the IP Act are required for conformity with the TRIPS Agreement, it must be ensured that national interests are not jeopardised considering Sri Lanka's exceptional status as a small developing country with a weak industrial base.

Recommendations :

- 1.** Amend IP Act to -
 - 1.1** provide for an opposition period before the grant of a patent
 - 1.2** provide for mandatory publication of patent applications, grants and rejections in the Government Gazette and a period of time from the date of the Gazette for objections to be filed
 - 1.3** provide for objections to be heard before a tribunal consisting of 3 persons, one of whom should be a scientist with expertise in the particular field, and another a lawyer knowledgeable in the IPR field
 - 1.4** ensure protection from unauthorised import and manufacture of goods infringing IPR by suitable legislation and better enforcement.
- 2.** Proposed changes to IPR laws should be given adequate publicity, and widely discussed before the laws are presented to Parliament ; representations by all interested parties should be encouraged.

- 4.2 A lack of awareness of IPR issues and procedure among inventors, scientists and the general public was noted.

Recommendation :

3. The Ministry of S&T, NARESA and the Sri Lanka Inventors Commission should play a positive role to increase awareness of IPR issues.

- 4.3 There are very few trained IPR personnel at present in Sri Lanka. Our patent office too requires modernization.

Recommendations :

4. Modernise and strengthen the patent office, with adequate trained personnel and improved infrastructure, and access to patent information including on-line access.
5. Patent law should form part of the curriculum of law courses, and opportunities provided for specialisation in order to build up a base of professionals in this field.
6. Encourage the incorporation of an institute concerned with the professional interests of patent personnel and ensure that the terms of employment of trained personnel are attractive.

- 4.4 The major areas where IPR could be obtained by Sri Lankans today can be identified as in the utilization of natural resources and in computer software development. Sri Lankan holders and potential holders of IPR appear to have a valid complaint that the assistance presently provided for obtaining IPR and for licensing, franchising and manufacture of goods covered by IPR is woefully inadequate.

True IPR protection requires the filing of patents in the largest possible number of countries and most Sri Lankan inventors simply do not have the resources to do so.

Most inventors find themselves unable to mobilize funds for the development stage of their product and their products never reaches the production stage because of the lack of funds for the D stage in R & D. What little private venture capital is available is invested only on projects which are assured of success and financial return. Sri Lankan venture capital appears to be not prepared to take any risks, inventors having to provide sufficient collateral before investment is made on their projects.

Recommendations :

7. Government should explore methods of assisting inventors in securing protection overseas if the invention appears to be of high commercial value and worthy of such protection.
8. Government to formulate methods to encourage the availability of risk capital, and provide direction support and expertise, if necessary from abroad.

9. Establish a Technology Development fund which would fund the development stage of new inventions, after peer review and independent approval.
10. Government to actively promote access by Sri Lanka inventors to assistance by UNIDO for technology transfer.

4.5 Regional cooperation in IPR will be of benefit to Sri Lanka and SAARC in general. The present IPR laws of SAARC countries vary widely although they are expected to become less different once TRIPS promoted amendments are in place. With the protection of new plant varieties and microorganisms permitted under the TRIPS agreement, there will be the need for depositories for samples of the protected material.

Recommendations :

11. Establish avenues for exchange of information on IPR between the SAARC countries.
12. Obtain assistance from bigger SAARC countries to provide expertise to improve IPR environment in Sri Lanka.
13. Establishment of a Regional Depository for microorganisms in one of the SAARC countries.
14. Ideally SAARC cooperation should evolve into the establishment of a regional arrangement like OAPI in Africa where a single patent in any one country covers the whole region or, if this is not possible, for an arrangement like the European patent or the African ARIPO patent which simplifies patenting in other countries in the region after the initial filing in one country.

Workshop on Science & Technology and IPR Issues - Industry & Invention

SUMMARY OF RECOMMENDATIONS

1. Amend the Intellectual Property Act to -
 - 1.1 provide for an opposition period before the grant of a patent
 - 1.2 provide for mandatory publication of patent applications, grants and rejections in the Government Gazette and a period of time from the date of the Gazette for objections to be filed
 - 1.3 provide for objections to be heard before a tribunal consisting of 3 persons, one of whom should be a scientist with expertise in the particular field, and another a lawyer knowledgeable in the IPR field
 - 1.4 ensure protection from unauthorised import and manufacture of goods infringing IPR by suitable legislation and better enforcement.
2. Proposed changes to IPR laws should be given adequate publicity, and widely discussed before the laws are presented to Parliament ; representations by all interested parties should be encouraged.
3. The Ministry of S&T, NARESA and the Sri Lanka Inventors Commission should play a positive role to increase awareness of IPR issues.
4. Modernise and strengthen the patent office, with adequate trained personnel and improved infrastructure, and access to patent information including on-line access.
5. Patent law should form part of the curriculum of law courses, and opportunities provided for specialisation in order to build up a base of professionals in this field.
6. Encourage the incorporation of an institute concerned with the professional interests of patent personnel and ensure that the terms of employment of trained personnel are attractive.
7. Government should explore methods of assisting inventors in securing protection overseas if the invention appears to be of high commercial value and worthy of such protection.
8. Government to formulate methods to encourage the availability of risk capital, and provide direction support and expertise, if necessary from abroad.
9. Establish a Technology Development fund which would fund the development stage of new inventions, after peer review and independent approval.
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**WORKSHOP ON
SCIENCE & TECHNOLOGY AND IPR ISSUES - INDUSTRY & INVENTION**

**Date: 22 January 1998
Venue: NARESA, Auditorium**

P R O G R A M M E

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|--------------------|---|---|
| 09.15 - 09.30 am | - | Registration of Participants |
| 09.30 - 09.40 am | - | Welcome Address
Prof. Priyani E. Soysa
Director General, NARESA |
| 09.40 - 10.20 am | - | Keynote Address
Mr N.R. Subbaram
Former Head, Intellectual Property Management Division,
CSIR, India |
| 10.20 - 10.40 am | - | Third World Scientists & IPR
Prof. V. Kumar
University of Peradeniya |
| 10.40 - 11.00 am | - | T E A |
| 11.00 - 11.20 am | - | Overview of the pharmaceutical industry in Sri Lanka
Mr H.K. Sirisena
State Pharmaceuticals Corporation |
| 11.20 - 11.40 am | - | Herbal medicine industry in Sri Lanka
Dr U. Pilapitiya
Bandaranaike Memorial Ayurvedic Research Institute |
| 11.40 - 12.00 noon | - | Problems facing the inventor in Sri Lanka
Mr P.N. Nandadasa
Flexport (Pvt) Ltd. |
| 12.00 - 01.15 pm | - | Discussion |
| 01.15 - 01.30 pm | - | Conclusions / Recommendations |
| 01.30 - pm | - | LUNCH |

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This workshop is sponsored and organized by the Natural Resources, Energy and Science Authority