Intellectual Property Rights Management in Developing Countries

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CENTRE FOR SCIENCE & TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES
(NAM S&T CENTRE)

2012
DAYA PUBLISHING HOUSE®
New Delhi - 110 002
Foreword

In the current competitive and knowledge driven global economic environment, intellectual property rights, which are the results of human creative efforts, have become unprecedentedly relevant and important to any country, whether industrialized or developing. The future of the developing world would largely depend on their ability to create and generate knowledge and the resultant intellectual property rights thereby narrowing the knowledge gap and enhancing the use of knowledge for economic growth.

As the subject of intellectual property spreads across many facets of human life such as innovation and creativity, trade, industry, environment, health, access to knowledge and food security, it is now essential to make the Intellectual Property system, in any given country, community associated and development oriented. The intellectual property rights, if duly managed and used, can extensively contribute to the economic growth and poverty alleviation. Thus, the promotion of innovation and creativity in the developing countries, particularly aiming the knowledge related and technology intensive industries demands high priority. Moreover, the effective protection and management of national Intellectual Property assets such as geographical indications, traditional knowledge, traditional creative expressions and genetic resources require constructive attention.

Having realized the importance of the role of Intellectual Property in socio-economic advancement, most of the developing countries are in the process of building up or updating their Intellectual Property systems in line with domestic needs and international standards. They are making attempts to respond to the new order and address the Intellectual Property issues - both national and global - with multi-faceted approaches as well as expectations. This process involves many challenges. In meeting those challenges, the developing economies must not only to be innovative and forward looking but also be mindful of the increased south – south cooperation. The concerted efforts will facilitate the establishment of strong national Intellectual Property systems helping them to achieve public policy needs and economic development goals.
In this context, the organization of the ‘International Advanced Training Course on Intellectual Property Rights (IPR) for NAM and Other Developing Countries’ during July 12-17, 2010 in New Delhi/Manesar, India by the Centre for Science and Technology of the Non-aligned and Other Developing Countries (NAM S&T Centre) in association with the Patent Facilitating Centre (PFC) of the Technology Information, Forecasting and Assessment Council (TIFAC), Government of India, was timely and futuristic. Based on the deliberations at the training course, the NAM S&T Centre has brought out this book containing 21 papers authored by the intellectuals and experts mainly from the developing countries for wider dissemination of knowledge and experience on Intellectual Property. It is also a highly welcome step forward for enhanced South–South cooperation. The book will be useful to those interested not only in Intellectual Property rights but also in development oriented activities in general. I sincerely congratulate the authors, editors, publisher and others responsible for its publication on their noble efforts and grand success.

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The relationship between Intellectual Property Rights (IPRs) and development is very complex indeed. On one hand, there are theoretical arguments suggesting that stronger IPRs can have positive effects on development. On the other hand, there are theoretical arguments against stronger IPRs in developing countries.

However, amidst all of the arguments, developing countries are trading with developed countries that utilise IPR as a source of competitive advantage; this then poses a challenge for developing countries and urges them to recognise Intellectual Property (IP) as the tool for competitive advantage.

The challenge for developing countries is converting what comes out of basic research into tangible outcomes, to which real value has been added, or beneficiating indigenous knowledge and packaging it in a way that would generate value.

Majority of developing countries have widespread genetic resources from plants, animals and micro-organisms, amounting to 90 per cent of the world’s genetic resources (GR). Communities and individuals in developing countries have exploited these GR through generations. Their use is embodied in what often is referred to as Traditional Knowledge (TK). However, the use of such knowledge and resources is not limited to local contexts, and many innovations relate to and draw on them. The broader use of TK and GR raises the prospect that they may play an important role in driving growth in developing countries. Therefore, the main issue is how this prospect might be best realised, particularly when the exploitation of TK and GR is coming increasingly under the governance of various, and sometimes conflicting IPR frameworks.

It is however encouraging to note that developing countries are working towards ensuring that their IPR are protected and are implementing mechanisms to assist with the exploitation thereof in realising the return on investment for their countries.

Critical shortage of skills in terms of trained individuals having practical understanding of IP in relation to the development of knowledge based economies
and personnel who know how to assess the value of IP is always a challenge facing developing countries.

Governments in developing countries are frequently encouraged to focus upon educating people to make IP and its role in economic development more understandable especially in terms of research institutions and provision of insights into the use of the IP system.

Developing countries should then focus on identifying and developing their strengths, projecting them to be a sustainable source of competitive advantage.

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Introduction

Intellectual Property Right (IPR) is an exclusive right of wealth created and legally possessed by people engaged in the field of science, technology, literature and art. In today’s globalised competitive society, an IPR system focusing on patent, trademark, copyrights, etc. is playing an increasingly important role in economic and social development. In this connection, the developing countries in particular have several challenges to overcome while evolving their own IP systems in order to satisfy their public policy needs and socio-economic developmental goals. Over the years, these countries have responded to the new order in different ways and have tried to handle global IPR issues with a sense of commonalty; especially in the matters related to protection of genetic resources and traditional knowledge. There is a sense of urgency in developing IP systems in each country to derive maximum advantage from the IPR system to address efficient utilisation of innovations and creativity.

Looking into the increasing significance of IPR related issues and assessing the need of direct participation of scientific community of the developing world in legal management of the knowledge of science and innovations, the Centre for Science and Technology of the Non-aligned and Other Developing Countries (NAM S&T Centre) in association with the Patent Facilitating Centre (PFC) of the Technology Information, Forecasting and Assessment Council (TIFAC), Government of India organised a six days ‘International Advanced Training Course on Intellectual Property Rights (IPR) for NAM and Other Developing Countries’ during 12-17 July 2010 in New Delhi/Manesar, India. The theme of the training course was ‘Development of IPR Systems for National Growth’ and its objective was to create awareness among scientific community about the legal framework of scientific inventions and practices in developing countries. The programme was supported by the Department of Science and Technology (DST), Ministry of Science and Technology, Government of India.

The training course was attended by 49 trainee participants from 28 countries, including Botswana, Brazil, Cambodia, Colombia, Egypt, Ghana, India, Indonesia, Iran, Iraq, Jamaica, Kenya, Malawi, Malaysia, Mexico, Myanmar, Nepal, Nigeria,
Pakistan, Panama, Peru, South Africa, Sri Lanka, Sudan, Tanzania, Turkey, Uganda and Zambia, of which 18 delegates were from the host country India and the remaining 31 represented other developing countries. There were 11 resource persons/trainers from India, who delivered 17 lectures on various themes related to IPR. The overseas trainee participants were from Botswana [Mr. Botshelo Maedza, Acting Principal Civil Engineer, Botswana Technology Centre (BOTEC), Gaborone and Mr. Letsomo la Tshipa, Ass. Performing Arts Officer (AAW – Copyright), Department of Arts and Culture, Ministry of Youth, Sports and Culture, Gaborone]; Brazil [Dr. Marylin Peixoto da Silva Nogueira, Director, ICT Policies and Sectoral Programmes, Ministry of Science and Technology, Brasilia]; Cambodia [Mr. Chhean Piseth, Chief Officer, Department of Industrial Property, Ministry of Industry, Mines and Energy, Phnom Penh]; Colombia [Ms. Maria Consuelo Velásquez, Intellectual Property Advisor, Administrative Department of Science, Technology and Innovation, Columbian Institute for the Development of Science and Technology (COLCIENCIAS), Bogotá]; Egypt [Ms. Handra Mohamed Mohamed Nagy, Access To Knowledge Project Officer, Alexandria]; Ghana [Ms. Nana Ama Akyiaa Prempeh, Principal State Attorney, Registrar General’s Department, Ministry of Justice, Kumasi]; Indonesia [Dr. Anny Sulastwatty, Head of Legal and Public Relation Affair, Ministry of Research and Technology, Jakarta]; Iran [Dr. M. Reza Bakhtiar, Director and Head of Intellectual Property Office, Iranian Research Organization for Science and Technology (IROST), Tehran]; Iraq [Miss Teriza Jasim Ridha, Director of IPO, Central Organization for Standardization and Quality Control (COSQC), Baghdad]; Jamaica [Mrs. Yvette Sutherland-Reid, Senior Legal Officer/Attorney-at-law, Ministry of Industry, Investment and Commerce, Kingston]; Kenya [Mr. Kioko Nzuki Mwania, Principal Research Officer, Directorate of Research Management and Development (DRMD), Ministry of Higher Education, Science and Technology, Nairobi]; Malawi [Mr. Kudonda Fexter Nseula, Technology Transfer Officer (Development) and Mr. Petros Orton Shiyombo Musukwa, Technology Transfer Officer (Dissemination), National Commission for Science and Technology (NCST), Lilongwe]; Malaysia [Mr. Ahmad Fareed bin Abdul Rahman, Assistant Secretary, Ministry of Science, Technology and Innovation, Putrajaya]; Mexico [Ms. Ana Paula Ramírez Ramírez, International Affairs Coordinator, Tequila Regulatory Council, Jalisco]; Myanmar [Dr. Phyo Mon Win, Assistant Director, Intellectual Property Section, Ministry of Science and Technology, Nay Pyi Taw]; Nepal [Dr. Chiranjivi Regmi, Chief, Faculty of Technology, Nepal Academy of Science and Technology (NAST), Kathmandu]; Nigeria [Dr. Martins Ochubiojo Emeje, Research Fellow and IP and Technology Transfer Coordinator, Biophysical Drug Delivery Unit, National Institute for Pharmaceutical Research and Development (NIPRD), Abuja]; Pakistan [Ms. Syeda Rumla Naqvi, Industrial Liaison Officer, Pakistan Council of Scientific and Industrial Research (PCSIR) Labs, Karachi]; Panama [Dr. Catherina Caballero-George, Staff Scientist, Unit of Molecular Pharmacology and Pharmacognosy, Institute for Scientific Research and High Technology Services (INDICASAT), Clayton]; Peru [Mr. Carlos A. Irigoyen, Deputy Chief of Mission, Embassy of Peru in New Delhi]; South Africa [Mrs. Sheila Mavis Nyatlo, Deputy Director, Department of Science and Technology, Pretoria]; Sri Lanka [Mr. Merenge Ne Antony Mervyn Fernando, Senior Mechanical Engineer, National Engineering Research and Development Centre (NERDC), Eka, Ja Ela]; Sudan [Mr.
Ghazafi Abdalla Mohamed Ali, Counsellor, Sudanese Ministry of Foreign Affairs, Khartoum; Tanzania [Ms. Judith Francis Kadege, Research Officer (IP Law), Tanzania Commission for Science and Technology, Dar-Es-Salaam]; Turkey [Dr. Burcun Dikmen, Chief Researcher, Scientific and Technical Research Council of Turkey (TÜBİTAK) and Ms. Özge Ephan, Attorney at Law, Patent and Trademark Attorney, Legal Department/IPR Office, TÜBİTAK, Ankara]; Uganda [Mr. Stephen Rwagweri, Executive Director, Engubu Za Tooro, Fort Portal and Mr. Frederick Okumu, Network Officer, Uganda Industrial Research Institute (UIRI), Kampala]; and Zambia [Mr. Lloyd Samson Thole, Assistant Registrar (IP), Patents and Companies Registration Office, Lusaka].

The Indian trainee participants were Ms. Anshul Fuloria, Ms. Aruna, Ms. Dipti, Dr. Deepika Singh, Mrs. Deepika Chaturvedi, Mrs. Geeta, Ms. Shikha Tejswi, Ms. Shashank, Ms. Shivanip Shrivastava, Dr. Rollie Verma, Ms. Raunak Dubey, Mrs. Neeti Sahu and Ms. Divya Pandey from PFC-TIFAC; Ms. Debanjana Dey from the National Institute of Science, Technology and Development Studies (NISTADS), New Delhi; and Mr. Gaurav Gaur, Ms. Chitra Prasad, Ms. Priyanka Rana and Ms. Isha Parmar, Research Assistants from NAM S&T Centre.

During the Training course, lectures were delivered by eminent Indian experts and professionals Mr. R. Saha, Director, PFC-TIFAC, New Delhi [on ‘Basics of IPR Management’, ‘International Treaties’, ‘IPR Audit’, ‘IPR in International R&D Collaborations’, ‘IPR Policy Development in Institutions’, ‘TRIPS and Emerging Issues, and ‘Valuation of IPR’]; Mr. A. K. Garg, Director, Department of Information Technology (DIT), Government of India [on ‘Protecting Software Inventions’]; Prof. V.C. Vivekanandan, NALSAR University of Law, Hyderabad [on ‘International Disputes in IPR-DSB Approach’]; Prof. S. Majumdar, Patent Attorney, S. Majumdar and Co., Kolkata [on ‘IPR Portfolio Management’]; Mr. Rajendra Kumar, Attorney, K&S Partners, Gurgaon, India [on ‘Protection and Management of Geographical Indications’]; Dr. S. Mauria, ADG (IPR and Policy), Indian Council of Agricultural Research (ICAR) [on ‘Practices in Protection of New Plant Varieties’]; Mr. V. K. Gupta, Director TKDL, Council of Scientific and Industrial Research (CSIR), New Delhi, India [on ‘IPR and Traditional Knowledge’]; Dr. K. Satyanarayana, Sr. DDG, Indian Council of Medical Research (ICMR), Government of India [on ‘IPR Issues in Medicines – Case of Drugs Protection from Developing Countries’]; Mr. Yashawant D. Panwar, Scientist-D, PFC-TIFAC, New Delhi [on ‘Patentability Analysis including Patent Search’]; Prof. Madhukar Sinha, WTO Study Centre, Indian Institute of Foreign Trade, New Delhi [on ‘Digital Rights Management’]; and Mr. V. Lakshmikumaran, Sr. Attorney, Lakshmikumaran and Sridharan Associates, New Delhi [on ‘Principles and Practices of IPR Licensing’].

The overseas participants presented their country/institutional status reports in two sessions respectively chaired by Dr. A. K. Sood, Head, International Division and Adviser, DST, Government of India and Dr. Balram Sharma, Indian Agricultural Research Institute (IARI), New Delhi.

Field visits were undertaken by the participants to PFC-TIFAC office at Vishwakarma Bhawan, New Delhi; Intellectual Property Office at Dwarka, New
Delhi and other places. During this visit, Mr. R. Saha, Director, introduced the participants with the functions of the PFC and its increasing popularity in the recent years and a lecture was delivered by Ms. Sangeeta Nagar, Principal Scientific Officer on the ‘Women Scientist Programme’ being executed by PFC-TIFAC followed by questions and answers session. The visitors were specifically interested in knowing how they may initiate similar programmes in their own countries.

In the field visit to the Indian Patent Office (IPO), New Delhi, Dr. K.S. Kardam, Deputy Controller of Patents and Designs and Mr. S. K. Swarup, Assistant Controller of Patents and Designs presented an overview of the operations and services being executed by the IPO including its digitised information system and easy-to-access website.

At the Concluding Session Dr. Rajiv Sharma, Adviser, International Division, DST, Government of India was the Chief Guest. Mr. R. Saha, Director, PFC-TIFAC presented a summary of the Training Course followed by a Feedback Session chaired by the undersigned in which participants gave their valuable and critical comments on the course content and made suggestions for designing similar programmes in future. Some participants even mentioned that the training course organised in Manesar was very different and more beneficial to the developing countries than the ones being organised by the agencies such as WIPO and ARIPO.

The brainstorming discussion among the participants and the trainers was finally concluded with significant outcome, and to ensure the sustainability the participants, trainers and organisers unanimously adopted the ‘Manesar Resolutions’.

I acknowledge with gratitude the deep involvement and determined efforts of Mrs. Sheila Mavis Nyatlo, Deputy Director, Department of Science and Technology, Pretoria, South Africa, Dr. Catherina Caballero, Staff Scientist, Unit of Molecular Pharmacology and Pharmacognosy, Institute for Scientific Research and Technology Services (INDICASAT), Clayton, Panama and Mr. Merengnege Antony Mervyn Fernando, Senior Mechanical Engineer, National Engineering Research and Development Centre, Ekala, Ja Ela, Sri Lanka in editing this valuable publication. I am also indebted to the entire team of the NAM S&T Centre, particularly Mr. M. Bandyopadhyay, Dr. V.P. Kharbanda, Mr. Gaurav Gaur, Mr. Yasir Abbas Rizvi, Ms. Chitra Prasad, Ms. Priyanka Rana, Ms. Isha Parmar and Mr. Pankaj Buttan in compiling the presented papers, liaising with the authors and editors and giving a shape to this volume.

I trust that the material presented in this volume will be highly useful not only for the scientists and professionals engaged in the field of IPR, but also for the concerned authorities of the developing countries in taking appropriate policy measures to create awareness about these rights.

Prof. Arun P. Kulshreshtha
Director and Executive Head,
NAM S&T Centre
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Chapter 1

**South African Intellectual Property Rights Status Report**

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**ABSTRACT**

The South African patents system is governed by the Patents Act, 1978 which affords protection to patents for inventions (including patents of addition). The Companies and Intellectual Property Registration Office (CIPRO) of the Department of Trade and Industry administers South Africa’s Intellectual Property Rights (IPR) Regime whilst the Department of Science and Technology is the custodian of the Intellectual Property Rights Act from Publicly Financed Research and Development, Act No. 51 of 2008.

This Act seeks to ensure that intellectual property emanating from publicly financed research and development is identified, protected, utilised and commercialised for the benefit of the people of the Republic, whether it be for a social, economic, military or any other benefit.

Various policy initiatives largely driven by South Africa’s Department of Science and Technology and its instruments, have played and will continue to play an important role in the institutions contribution to South Africa’s economic growth. Intellectual Property Rights, in terms of patenting activity is dependent on research activity and research output.

**Keywords**: Intellectual Property, South Africa, IPR Act, NIPMO, Patents.

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**Introduction**

The innovation towards a knowledge-based economy plan aims to drive South Africa’s transformation from a resource-based towards a knowledge-based economy;