CHAPTER I

INTRODUCTION

1.1 Background of study

The history of intellectual property rights goes back to 17th century. Over the years, the definition of Intellectual Property Rights (IPRS) has expanded to cover a number of areas. The term 'intellectual property' refers to the recognition that the inventor should be granted a reward such as the exchange right to use it or to earn royalties renting out its use.[1] Trade Related Intellectual Property rights (TRIPS) is the result of seven years of negotiations-September 1986 to December 1993, part of the Uruguay Round of Multilateral Trade negotiation of the General Agreement of Trade and Tariff (GATT). These negotiations were launched at Punta Del Este, Uruguay and formally concluded in April 1994, at marrakesh, Moricco, along with the other negotiation of Uruguay Round. It came into force on the first day of 1995 with the establishment of the WTO.[2]

Today's global trade has largely been influenced by the technological and commercial innovations and inventions. Moreover, ideas and knowledge have become an increasingly important part of the present day trade. Films, music, recording books computer software and on line services are bought and sold because of the information and creativity they contain, not usually because of the plastic matador paper used to make them this observation makes it clear that most of the value of new medicines and other high technology products lies in the amount of inventions research, design and testing involved. Many products are

[1] Martin Khor (1990). Intellectual Property (TRIPS): tightening TNC Monopoly on Technology in the University Ronnd and Third world Sovereignty.
[2] WTO, Annual Report 2001.

used to be traded as low technology goods or inventions and design in their value. For example, brand -named clothing or new verities of plants.

Since other unauthorized persons or parties can copy these inventions, designs or creations, it becomes essential to protect the exclusive right of the creator. In this concern, creators are given the right to prevent others from using their creations. These rights are known as intellectual property rights (TRIPS). These take the number of forms. For example, books paintings and films come under copyright; invention can be patented.

Brand names and product logos can be registered etc. The WTO's agreement on TRIPS attempts to narrow the gap in the way these rights are protected around the World and to bring them under common international rules. When there are trade disputes over these rights, The WTO dispute settlement mechanism is there. The agreement covers mainly five issues.[3]

1. How basic principles of the trading system and other international intellectual property agreement should be applied.
2. How to give adequate protection to the intellectual property rights.
3. How countries should enforce those rights adequately in their own territories.
4. How to settle disputes on intellectual property between members of the WTO.
5. Special transitional agreement during the period when the new system is being introduced.

[3] WWW.WTO.ORG

The object of these agreements is products of the human mind whose creators are granted protection known as intellectual property (IP) rights. They include:[4]

1. Copy right and related rights (protects the authors' book and other artistic creations)
2. Trademark, including service mark (Trade signs or symbols eligible for protection and the minimum rights conferred on their owners)
3. Patents (apply to rights of inventors)
4. Industrial designs (protects rights to ornamental designs)
5. Layout-designs of integrated circuits(Topographic)
6. Undisclosed information (trade secrets having commercial values)
7. Geographical indication (use of place name to describe the product)

TRIPS is highly sensitive and critical agreement of WTO which has long term pros and cons particularly for developing and least developed economies of the World. Intellectual property may be defined as a product of human minds. The rights granted to the innovators are defined as intellectual property rights. TRIPS aim to check any unauthorized use of intellectual property. It does not allow any one to exercise any imitation of an original invention. TRIPS cover patent copyright, trademark, trade secret, geographical indication, and industrial design of integrated circuits.

It encourage innovation by providing economic gain to the innovator, by protecting the rights of innovator and by punishing infringement i.e. privacy, imitation (das, 2003:139)

The history of IPRS goes back to 1883 when the Paris convention

[4] Nepal Rastrya Bank (NR B) (2003). Kathmandu, NRB Publication.

was signed to provide protection to industrial property. It was followed by the Berne convention (1886), which provides protection to literary and artistic work. These conventions have been amended several times and still form the backbone of global IPR system (Ghimire: 2004). In order to coordinate all IPR-related conventions and treaties, the United Nations (UN) system crested the World intellectual property organization (WIPO) (It is explained in annex:3) in 1967. With the emergence of the past-industrialized World stage, especially after the rise of wide international blocs protection became, gradually, an object of huge concern, rather than mere segmental issue (Levy machado: 1996).

Intellectual property (IP) can be loosely defined as creations of the human mind, and intellectual property rights (IPRS) as legal rights governing the use of such creations, the agreements on Trade related Aspect of Intellectual Property Rights TRIPS) which came into effect with the establishment of WTO on Jan 1, 1995, is the most comprehensive international agreement on intellectual property to date. This is not only because of the breath of the subject matter covered but also on accounts of its near-universal applicability. 148 current members must implement the TRIPS agreement. When fully implemented, the agreement will unambiguously strengthened the protection of intellectual property rights almost world wide, a feat not achieved by any single international treaty up to now.

The TRIPS agreement covers all majors IPRS including some new areas and rights not addressed before by international law or in some cases, even by national laws of many industrial countries. Its implementation will necessitate changes in the IPR laws of all WTO members, without exception. Undoubtedly, however, the more important changes are those in the relevant laws, regulations, and procedures of

developing countries, where many sectors of economic and social activities such as agriculture, health, education and culture may be affected. IN addition, future ways of doing business may change in some of these sectors in some developing countries on account of increased awareness of and evolving attitude towards IPRs (Watal 2000a).

Following the entry into force of the TRIPS agreement, new international IP instruments have been found to be necessary to keep up with technological developments. Some of have been found to be necessary to keep up with technological developments. The World Intellectual Property Organization (WIPO) in particularly in relation to the Internet has introduced some of these. In recent years, developing country members of the WTO gave proposed several changes, not least to being under the TRIPS agreement the issues of traditional knowledge and genetic resources.

It encourage innovation by providing economic gain to the innovator, by protecting the rights of innovator and by punishing infringement i,e privacy, imitation(das,2003:139).

Nepal has entered into global multilateral trading regime, WTO as the 147thmember in April 23, 2004. In depth analysis is required to identify the possible opportunities and threats of WTO membership to various sectors in the country. Trade Related Aspect of Intellectual Property Rights (TRIPS) is one of the visible threats from WTO membership. (Shrestha: 2005). The TRIPS Agreements is one of the most contentious agreements ever frame under WTO regime, the agreement allows the patenting of ideas, expressions, innovations, creations and technology. Nepal needs to abide fully by the provisions of the TRIPS Agreement from 1 January 2007. (Shrestha: 2005). Intellectual Property Administration is not entirely new to Nepal. Nepal's first patent, design

and trademark Act was promulgated as far back as 1967 and the first copyright Act came in 1965.Although Nepal has more than half a century long history of IP administration, there are only 53 patents and 60 industrial designs registered till 2002. Patent, the most impotent industrial property seems lacking as compared to the other country especially India. Patent offices are expected to generate a large amount of revenue. India earned 72% revenue from patent out of total revenue generated by industrial property. (Annual Report: 2002) The prevailing act does not cover all aspects of industrial property such as integrated circuits or layout design, utility model, different kind of marks. Although the right to industrial property is stated in the act, the rights of owner conferred by the protection are inadequate. There is dissatisfaction among the IP holder on enforcement provision of the act. (WIPO seminar: 2005). Penalty for infringement of rights is very nominal and provisions for confiscation of infringement-related goods and compensation are not clearly defined.

The currently working act regards to Industrial Property does not compatible with the provision of TRIPS and the Paris convention for the Protection of Industrial Property. To overcome these shortcomings, an integrated Industrial property Act is under the process of legislation. Only enactment of new act is not sufficient to assure Intellectual Property Administration. Lack of awareness of the important of intellectual property rights for scientific, technological and industrial development, Nepal is still back in taking benefits from IP sectors.

1.2 Statement of the problem

The WTO has a separate agreement called the Trade Aspect of Intellectual Property Rights (TRIPS). It lays the minimum standards of protection of intellectual property rights (IPRS) with respect to trade.

Under the agreement, the sector, such as protection of patents, copyrights, trademarks, industrial designs, geographical indications, etc are covered under the existing conventions on IPRS of the World Intellectual property organization (WIPO). The prime objective of this agreement is to ensure that the rights available to protect holders are not abused and to discourage trade in counterfeit and pirated goods internationally.

Whether IPRS are good or bad things the developed World has come to an accommodation with them over a long period. Even if their disadvantages sometimes outweigh their advantages, by and large the developed World has the national economic strength and established legal mechanisms to overcome the problems so called. Insofar as their benefits outweigh their disadvantages, the developed World has the wealth and infrastructure to take advantages of the opportunities provided. It is likely that neither of these holds true for developing and least developed countries (CIPR: 2002)

The different periodic plan of Nepal failed to incorporate IP policy and strategies timely. It shows the government does not have specific policy guidelines and long term vision document on Intellectual Property (chalise report: 2005). The Tenth plan document, however, mentions intellectual property to analyze the protection of farmer's Rights as a strategy for industrial and R&D development. The plan mentions "Intellectual property will be protected and its entrepreneurial use will be promoted". The plan aim to enhance the institutional arrangement of department of industry in order to ensure better IP administration (Tenth plan: 2002). Te plan document also mentioned that IP law will be making compatible with international practices and will be enforced. However, no programmes or activities are suggested to follow these policy guidelines (Chalise report: 2005).

Establishing the infrastructure of an IPR regime, and mechanism, for the enforcement of IP rights, is costly both to government and private stakeholders. In developing countries, where human and financial resources are scarce, and legal system not well developed, the opportunity costs of operating the system effectively are high. These costs include the cost of scrutinizing the validity of claims to patent rights (both at the application stage and in the courts) and adjudicating upon actions for infringement. Consideration costs are generated by the inherent uncertainties of litigation. These costs too need to be weighted against the benefit arising from the IP system (CIPR: 2002).

Regarding the TRIPS, agriculture trade would have both positive and negative effects. There will be costs for farmers in poor countries like Nepal where increasing pressure to grow crops for export, particularly high yielding varieties, are growing. Nepalese farmers are increasingly depended upon imported seeds and chemical fertilizers produced in the developed countries. Their dependencies on patented seeds and plant varieties, which are relatively expensive, have resulted in higher investment for farm production. Since Nepal has to depend upon import of agriculture inputs, insecticides and pesticides. Nepalese farmers will have to pay greater prices for such inputs due to increased prices of such goods as a result of higher royalties for the patent holders with a relatively inefficient production base and geographical disadvantage. Nepalese trade and industries will not bear fruits from a liberalized global market unless it aims to enhance productivity.

Owing to wide variation in its geography, Nepal is well endowed with plant verities. It will find identifying these resources extremely difficult and beyond its current capacity. It should establish a seed genes bank to protect their germ plasma and to make seed available for bio-

technical research by its national scientists. High expertise at the government and the private sector for research and development is required in this regard to benefits the farmers. It should evolve sustainable methods of agriculture and benefits by the reduction of imported inputs.

Nepal can, however, expect the benefit of foreign investment in agriculture from the provision of TRIPS if it guarantees national rules and regulations to protect the IPRS. Nepal is already a member of the WIPO and it has been working to amend the national legislations relating to the protection of the IPRS. Besides this, Nepal should promise a congenial atmosphere to attract foreign investment in potential agriculture sector for export.

There is necessity to pay more attention on innovation, research and development in both public and private sectors. Not only this Nepal should frame internal rules and regulations on the past of TRIPS to safeguard the intellectual property rights which will promote innovation in the country, We should quickly move forward to grab the opportunity to patent and traditional knowledge and skill which we inherited from generations to generations, if not that will be patented by MNCs and developed countries and the developing and LDCs will be crushed badly and the different traditional use of Haldi (Besar) , Karela, Neem etc, are being patented by MNCs (GL Das). So, the government should analyze the potential benefits and costs arising from TRIPs and have to move forward with intensive/ care by making suitable policies on behalf of Nepalese economy very soon.

1.3 Objective of the study

The general objectives of this study are to analyze the costs and benefits of to trade related intellectual property Rights (TRIPS) in

Nepalese economy. The specific objectives of this study are as follows:

- To review the WTO provisions on TRIPS.
- To examine status and the key development sectors, which can be more facilitated through strong protection of intellectual property rights.
- To examine the possible benefits and costs of agriculture arising from TRIPS in Nepalese economy.
- To examine the farmer's rights and its impact in agro-based economy.

1.4 Methodology of the study

The study is mainly based on content analysis. The data will be collected from secondary sources. Policies of HMG Nepal and some of the developing countries will be reviewed. A descriptive research design is adopted to analysis data. Internet search regarding the IP and development will be done through inception to completion of this research project.

1.5 Importance and scope of the study

Nepal has entered in multilateral trading regime where the role of intellectual. Property is very cruel. Nepal is still lagging behind in global trade as well as in national industrial development she has been taking poverty reduction as her main developed policy however there is absence in integrating intellectual property rights and developed policy. TRIPS have greater impact on the agro- prone economy of Nepal. In encourages the member countries for the protection of plant verities either by patents or by an effective suigeneris system or a combination or both (jha 2003).

Nepal can however, expect the benefits of foreign investment in

agriculture. From the provision of the TRIPS it guarantees national rules and regulations to protect the IPRS. Besides this, Nepal should promise a congenial atmosphere to attract foreign investment in potential agriculture sector for export. Until and unless the adequate research and study are not made it will be difficult formulate IP policy to support the pace of development. Though this study is done in very elementary form, I hope this study will open the sky for studying the various problems exists in integrating IP rights and development policy and administration of IP**.**

Nepal is already a member of the WIPO and it has been working to amend the national legislations relating to the protection of IPRS. Besides this, Nepal should promise a congenial atmosphere to attract foreign investment in potential agriculture sector for export.

Intellectual property Rights are now regarded as the vehicle for innovation, technological transfer which ultimately supports in economic development goals (MDGS) are beings major concerns for every country. Nepal has taken poverty reduction as her prime development policy. The tenth plan is its main policy document, which seems lacking in integrating intellectual policy with development policy. The provisions made in this regards are found inadequate. Nepal entered into WTO a multilateral trading regime as 147th member and recognizes the first member from least developed countries (LDCS). We have many questions set by WTO in acceding process. However the policies are not properly formulated to get benefits from the membership. So is in IPRS field.

1.6 Limitation of study

The scope of intellectual property regime is very wide. Due to the limitation of time and other resources, the study was only confined with benefits-costs analysis and its policies in favor of Nepal concerning

agriculture property right regime.

1.7 Organization of study

The chapter I of this study deals with the background of intellectual property in the global context as well show the problems associated with IP administration, Agriculture and together its integration with development policy in Nepal regarding TRIPS agreement of WTO. This chapter explains about the objective of this study, its scope and importance. The limitations and organization of this study are also presented in the first chapter. The chapter II deals with related literature, the literatures are organize in theoretical concept to written contribution of scholars involved in writing books and articles. It has written from two sides that is national and international context. The chapter III deals with the provision of comprehensive and legal aspect of TRIPS agreement created by WTO. The chapter IV presents the status and key development sectors which facilitated through strong protection of IP administration in the country. The chapter V and VI study the impacts and farmers' right on the agricultural sectors arising from TRIPS abreaction in the developing economics like Nepal. In the last chapter i.e. chapter VII summary, findings and recommendation are presented. Annexes are also included for better understanding of the report.

CHAPTER II

REVIEW LITERATURE

2.1 International context

In his book entitled[5] 'Intellectual property rights in the WTO and developing countries'' the author has tried to develop a better understanding of the background and content of the agreement and of latest post-TRIPS issues, he has also tried to point the way forward for these countries in adopting legislation in the area.

Regarding the future issues related to IPRS in the WTO and the author has observed that:

- TRIPS sets fairly high standards on IP protection as compared to what had existed in national and international law at time.
- According to him TRIPS have left many gaps; some are ambiguities due to the lack of clear contentious at the time of the negotiations and others have emerged later due to the rapidly changing development both technology and the law in the post negotiation periods.
- The appetite for strengthening TRIPS in the WTO seems for the moment, very poor, but there will be close monitoring of implementation of TRIPS by developing countries. Any reopening of TRIPS would be unwarranted before WTO dispute settlement bodies get a chance to examine these contentious issues.

[5] Jayshree Watal (2002) Intellectual Property Rights in the WTO Developing Countries, New Delhi, Oxford University Press.

- Developing countries in the meanwhile; demanding amendments to the agreement and incorporation of their demands on longer transitional periods, on biodiversity, on geographical indication, on financial and technical assistance in TRIPS implementation and the most importantly, on the transfer of technology.

- Different developing countries would have different interests of such countries to interpret TRIPS at the highest level of domestic innovation, attract foreign investment or the latest technologies. He found that, at present, few developing countries would have to voluntarily give up the flexibility that some provisions of TRIPS clearly allow in moderating high prices and or ensuring the wide dissemination of essential proprietary goods, services and technologies. Whether they will be forced to do so under the dispute settlement mechanism of the WTO or in a future TRIPS review is a question that remains to be answered in the future.

Another published book[6] (collection of articles) entitled TRIPS, the Uruguay round and Third world Interest adopted the descriptive methodology for writing. This book studies the provisions of TRIPS and the problems and treatment regarding the third world interest,

An interesting article[7] written by J.H Reichmann about the implication of the Draft TRIPS agreement for developing countries as competitors in an integrated world market. On his writing he propounded the three propositions underlie the developed countries' drive for

[6] Sir, Hans Singer, et al. (1999), TRIPS, the Uruguay Round and Third World Interest, India, BR Publishing Corporation.
[7] J.H. Reichmann, above note no. 6.

strengthened the intellectual property rights within the framework of the general agreement on tariffs and trade (GATT).

- Strong intellectual property rights exert an unreservedly positive influence on developed free market economies.[8]
- Strong intellectual property rights benefits all countries regardless of their present stage of development[9]
- The acquisition of non-indigenous knowledge *developing* countries other than by imports or license usually constitutes an illicit economic loss to he technology exporting countries[10]

These tensions about for the developed countries demand for extraterritorial protection of intellectual property rights, which aim to curb free- riding practices not illegal under existing international law and for the unilateral trade sanctions that both the United States and the European communities have exerted against countries that tolerate such practices.[11]

In the end, the author also analyze that several caveats must be born in mind when assessing the detailed result of this survey. First intellectual property rights are just one of he many variables that bear on

[8] Richard P. Rozek, Protection of Intellectual Property Through Licensing: Efficiency Consideration, 22 J. World Trade 27, 28-30 (1988).
[9] Richard T. Rapp and Richard P. Rozek, Benefits and Costs of Intellectual Property Protection in Developing Countries, 24 J. World Trade 75, 77-90 (1990).
[10] Emery Simon, U.S. Trade Policy and Intellectual Property Rights, 50 ALBANY L. REV. 501. 501 (1986).
[11] Marshall A. Leaffer, Proteting. United States Intellectual Property Abroad: Toward a New Multilateralism, 76. IOWAL. REV. 273, 292-306 (1991).

competitive capacity and the transfer of technology in general12 and no systematic analysis of these other variables is attempted here. Second, because the study focuses on the draft TRIPS agreement as it stands at the time of writing, it tends to ignore higher standards of protection likely to emerge from parallel negotiations concerning the harmonization of patents and copyrights generally or from regional trade agreement, such as NAFTA in particular,[13]

Third, the study briefly surveys all the relevant fields of intellectual property laws at the expense of more detailed analysis of specific sectors. On the basis of the above limitations, the author includes the following suggestions,

- The resolution of the above paradox lies in the gradual integration of international intellectual property law into the larger framework of international economic law.
- Developing countries would have to work harder to compete generally, and to acquire technological innovation specifically, in post- TRIPS environment
- Entrepreneurs in developing countries successfully emulate the strategic of small and medium sized firms in developed countries.

A published book[14] entitled A positive Agenda for Developing Countries, issues for future trade negotiations'' has adopted the

[12] Transnational Corporation and Management Division, United Nations Department of Economic and Social Development, International Property Rights and Foreign Direct Investment, U, N, DOC. St/CTC/SERA/24, UN Sales No. E. 93.II.A10(1993).

[13] HAROLD.C. WEGNER PATENT HARMONIZATION BY TREATY OR DOMESTIC REFORM (1993).

[14] UNCTAD, A Positive Agenda for Developing Countries Issues for Future negotiation, United Nation and Geneva (2000).

descriptive content analysis and prepared by UNCTAD secretary in relation with support4 given to developing countries for assisting them for future trade negotiation. The major difficulties faced by developing countries in implementing the TRIPS Agreement, he prioritize the following matters, they consider, merit attention:

- Extension of the transitional period to provide additional time in view of broadness and complexity of the reforms of IPRS laws required for domestic industries to adjust.
- Lack of technical and financial support to develop IPR rules adapted to domestic circumstances and stage of development and necessary institutional infrastructure.
- Adoption of specific measures facilitating the use of compulsory licensing as a means to ensure the transfer of technology (including environmentally onus technologies, and to meet public health concerns (e.g. compulsory licensing regime for WTO listed essential drugs)
- Shortening the term on patent, to bring the TRIPS agreement into line with the convention on biodiversity.
- Inclusion of new provisions in the TRIPOS agreement relating to the protection of traditional and indigenous knowledge and works of folklore.
- Considering the above difficulties, the author found the further negotiation and reformation on the TRIPS Agreement, which are as follows

- He realized further negotiation on TRIPS, in view of developing counties, be based on the recognition of major difficulties faced by them with modernizing the administrative infrastructure, modernizing and drafting new laws on the granting and protection of intellectual property, and creating an appropriate framework for promoting resource and development to endure that they would not continue to be only consume of foreign technology.
- He found that there is lack of clarity on the criteria used to decide what can and what cannot be excluded from patentability in Art 37.3(b). The exclusion of patentability of plants and animals should, in view of developing countries, be extended to microorganism, as there is no scientific basis for the distinction.
- Developing countries consider that TRIPS article 27.3(b) should recognize the principle, objectives and measures planned and proposed under the CBD and the international undertaking that member countries exercise sovereign rights over their birth resources.
- He found that the current procedure in Article 31 for the use of patent without authorization is highly restrictive. Certain drugs are essential and developing countries ague; any restriction on their production should be removed so as to make them available at reasonable prices.
- Recognizing that the provision has not been effectively implemented, developing countries argue that

guidelines on categories of incentives should also be established, and that the application of this article s should be excluded to all developing countries.

- It has been noted that the technology gap between developed and developing countries is widening. Articles 7, 8, 40, 66 and 67 are important obligations that quality other provisions of the agreement. Effective transfer and dissemination of technology at fair and reasonable cost to developing countries constitutions one of the elements in accelerating the pace of their economic and social development, and therefore developing countries are the view that developed countries should effectively implement their obligation in relation to transfer of technology.

A published book [15] entitled WTO and International Trade'' adopted the descriptive contents analytical methodology. This book studies the Uruguay Round Multilateral trade Agreement on the implementation related issues and concerns. It also informs the readers for development on the issues facing the world at large as a result of globalization role of the WTO.

The author in chapter 30 regarding TRIPS in title WTO and developing countries viewed the following findings. Firstly, the author found that the implication of the implementation and enforcement of the rules, disciplines and procedures called for the TRIPS Agreement would be the direct costs of generating or imposing administration mechanism.

[15] MB Raw Manjula Guru (2003), WTO and International Trade, New Delhi, Vikas Publishing House Pvt. Ltd.

Secondly, he found that devising national standards in the many complex areas of IPRS and affiliated instrument is in itself a difficult task and in some cases, require adequate allocation of specific resources for the adoption of legislation and institutional structures. Moreover, it is also recognize that in many countries there is an absence of appropriate means for proper registration and management of IPES owing to the requisite cost and lack of expertise.

Thirdly, he found that the TRIPS Agreement requires substantially strengthened protection and enforcement of IPRS in many countries, phased in over varying period of time. While such strengthening of the IPRS regime is expected to endanger positive impacts of development in develop9ing countries and inward inflow of foreign direst investment and technology transfer, it could also precipitate certain negative impacts, including higher prices for protected technologies and products and restricted abilities to achieve diffusion through product imitation or copying.

Fourthly, he found that while there is positive evidence of increased inflow of either technologies or foreign direct investment because of strengthening of IPR (certain earlier studies had no indicated positive result in this regard in respect of countries which have amended the IPR laws to bring them in line with required standard)[16], negative impact like increase in financial and administrative costs are certain and increase in prices of pharmaceutical products. On the basis of the above findings the author includes the following recommendations

i A number of developing countries have yet to adopt new legislature and judicial instrument, while others must modify

[16] IPRS and Foreign Direct Investment st.ctc/sera/24 at PPS 33 and 34.

their laws to bring them at par with the requirements of TRIPS Agreement.

ii Developing countries need an institutional framework to interact with the international trading order.

iii Developing countries need to have the necessary resources and set up to felicitate the collection and analysis the information, not only in term of their own trade policies and practices, but also in relation to the interaction of their trade regime with external environment.

Another published book[17] (collection of articles) entitled East Asia Integration, A trade policy Agenda For shared Growth', edited by Kathie Krumm and Homi Kharas, mainly focuses on one of the most important economic issues facing East Asian and Pacific Nations today concerning policy making, integration within the region for regional stability and poverty reduction. Luthire and others[18] give an interesting article about Intellectual Property Right regime. The major findings of them are as follows:

Firstly, he found that strengthened IPR regimes play a role in local technology generation by compensating inventors and creators. T he advanced emerging economies like China could stimulate innovation in technology due to the stronger enforcement of IPR regime. Similarly, Korea's dramatic success in patents registered in the United States grew quickly in the late 1990s, propelling Korea to sixth in the U.S patent ranking, overtaking India, Brazil and Singapore. Korea's strengthened

[17] Kathie Krumm and Homi Kharas (2004), East Asia Integrates, A trade Policy Agenda for Shared Growth, World Bank and Oxford University Press.
[18] Manjula Luthria, et al. (2004) Intellectual Property Rights Region, East Asia Integrates, A trade Policy Agenda for Shared Growth, World Bank and Oxford University Press.

IPR regime played a role, but so did industrial upgrading, a big push in research and development.

Secondly, he found that for a broader range of middle- to law income East Asian economies, copyright might offer more scope for gains, given the considerable talents of software developers, musicians, artists and authors. Indonesia is one example of a country in which there is potential for expansion in copyright- sensitive industries as rights are improved and successfully enforced, particularly for the software industry, small film industry, and investment in artist development by music recording companies.

Thirdly, he found that traditional knowledge happens to be concentrated in lower- income nations and its protection is generally accepted to have direct benefits for reducing poverty. Protecting traditional knowledge and genetic resources promotes efficient innovation in agriculture and biosciences.

Based on the above finding the writer recommends the followings,

- It will be worthwhile for more advanced emerging economies to identify complementary policies to boost innovative activity among private firms in their economies. It also might improve the marketing prospects of local artists, software developers, and publisher, such as improvements in telecommunications and private interest services which could be used initially to raise awareness abroad of Indonesian products.
- Some difficult conceptual and practical obstacles that will need to be overcome before substantive progress can be made in protecting or compensating the ownership of traditional knowledge. In East

Asia, the Philippines is experimenting in this field with existing and pending legislation.

Another published book[19] entitled, Business Guide to the World Trading System' envisage to proving support to the business community. It focuses mainly to understand clearly the business implications of these rules. It facilitate understanding of the business implications of the evolving trading system, and assist in maximizing benefits that can be derived from the new opportunities and in copying with the challenges the system represents.

The publication define the Intellectual Property Rights with the following manner that, Firstly, they include copyrights, patents and industrial design. Copyrights relates to the rights of the creators of literary and artistic works. Patents give exclusive rights to inventors; however, invention can be patented only if they are new, non- obvious and are capable of industrial applications. Industrial designs are new or original aesthetic creations determining the appearance of industrial products. These three are available for limited durations.

Secondly, Intellectual Property also includes trademark, service mark and appellation of origin (or geographical indication). In the case of these property rights, the aspect of intellectual creation- although existent- is less prominent. However, protection is granted to trademarks and other signs to enable manufacture to distinguish their products or services from those of authors. Trademarks help manufacturers build the consumer loyalty. They also assist consumers in making informed

[19] International Trade Centre UNCTAD/WTO (ITC) Common wealth Secretariat (CS), Business Guide to World Trading System. Second edition. Geneva. Chapter 20 pp 237.

choices on the basis of the information provided by manufacturers on the quality of their products.

On the basis of the above patent rights, there has been increasing realization that the standards adopted by countries to protect their IPRS as well as the effectiveness with which they are enforced have implications for the development of international trade, which three are especially worth noting.

- Economic activities in most developed countries are increasingly becoming research and technology-intensive. As a result of there export products- traditional (such as chemicals, fertilizers and pharmaceuticals) and comparatively new (telecommunications equipment, computers, software), now content more technological and creative inputs that are subject to intellectual property rights (IPRS). Manufacturers are therefore keen to ensure that wherever they market their products, these rights are adequately protected, thus enabling them to recoup their R$D expenditure.
- With the removal of restrictions on foreign investment by a large number of developing countries, new opportunities are emerging for the manufacture in these countries of patented products under license or within joint ventures.
- Technological advances that have made reproduction and imitation simple and cheap have matched the technological improvements in products entering international trade. In countries where laws on IPRS are not strictly enforced, this has resulted in increased in production of counterfeit and pirated goods, not only for sale I domestic markets but also for export.

The book[20] (The collection of articles) entitled Development, Trade and WTO published by the World Bank. An interesting article about TRIPS written Arvind Subramanan[21] regarding developing countries and viewed the following findings;

Firstly, he viewed that developing countries are seeking to protect two related distinct resources: traditional or indigenous knowledge, and genetic resources, which include seed, endoplasm, rare animals and plant species, and parts of plants and animals. The former refer to typically to practices in farming and agriculture that have been devised and refined over long period of time and can be clearly attributed to human actions. The latter by contrast, are not usually the product of human invention or creativity but are typically found in nature. The real important of genetic resources lies in the encoded genetic information that is providing to be valuable in developing medicines and pharmaceutical product to cure human disease and for rising agricultural productivity. He has given the following importance to protect indigenous knowledge and genetic resources.

- There is the economic benefit plant and other organisms are natural biochemical factories and yield many products that enhance human welfare.
- Biodiversity has important ecological function that sustains plant and human life.
- Biodiversity may have cultural and aesthetic value. In certain societies, plants and animals are reserved and have symbolic value,

[20] Frank J. Penna et.al (2002), Development Trade and WTO, The World Bank Publication.

[21] Arvind Subramanian,(2002), Trade Related Aspect Of Intellectual Property Rights, The World Bank Publication.

Elephants in Hinduism, the Bald Eagle in the United States, the Lily in France, and so on. Ecotourism is a manifestation of aesthetic value of biodiversity.

Secondly, although, the existence of these non-instrumental values of biodiversity is clear, it is extremely difficult to qualify them. It is to bear in mind that, given the uncertain state of science, a large part of the economic and ecological value of biodiversity may be an 'option value' that is a resource may have no known value today, but if it is preserved now, better information in the future as science progresses, will allow more informed decisions to be made about it. If future information suggests that the resource have no value, it can be destroyed; if the resource turns out to have a lot of value, it can be exploited. But the latter option will be precluded if the resource is destroyed today: hence the notion of the option value of preservation.

On the basis of the above complicacies the authors recommends the following matter;

- The developing countries must demonstrate that their actions at the national level to protect genetic resources and traditional knowledge are workable and that they do indeed lead to flows of resources to individuals and communities that serve to increase the incentives to protect these resources. This will strengthen developing countries' case for seeking to replicate internationally their systems of domestic protection.
- Works need to be intensified in national and international for a, including the World Intellectual Property Organization (WIPO), on resolving the difficult legal issues concerning the creation of a proprietary system for protection of traditional and genetic resources.

Another article on the Trade Related Aspect of Intellectual Property Rights published by WTO[22], expressed the view concerning the provisions and effectiveness of TRIPS agreement in general. This publication studies about the TRIPS in the following manner.

Trade Related aspects of Intellectual Property Rights (TRIPS) refers to the protection and enforcement of intellectual property rights and the lack of multilateral disciplines dealing with international trade in counterfeit goods have been growing sources of tension in international economic relations. There is the provision of effective enforcement measures for those rights.

It sets out the obligations of member governments to provide procedures and remedies under their domestic law to ensure that intellectual property rights can be effectively enforced. Procedures must permit effective action against infringement of intellectual property rights and should be fair and equitable, not unnecessarily complicated or costly, and should not entail unreasonable time-limits or unwarranted delays. They must allow for judicial review of initial administrative decisions and generally of initial judicial decisions.

The civil and administrative procedures and remedies spelled out in the text include provisions on evidence, provisional measures, injection damages and other remedies which would include the right of judicial authorities to order disposals or destruction of infringing goods. Members must also provide for criminal procedures and penalties at least in cases of willful trademark counterfeiting o copyright piracy on a commercial scale. Remedies must include imprisonment or fines sufficient to act as a deterrent.. Moreover, members must provide a mechanism were by rights

[22] WTO, World Trade Organization, Information and Media Relation Division WTO 1995, Switzerland.

holders can obtain the assistance of customs authorities to prevent the importation of counterfeit and pirated goods..

With respect to transition arrangements the agreement envisages a one year period for developed countries to bring their legislation and practices into conformity. Developing countries, in general, transition economies must do so in five years and least developed counties in 11 years.

Developing countries which do not at present provide product patent protection in area of technology are up to 120 years to introduce such protection. However, in case of pharmaceutical and agricultural comical products, they must accept the filing of patent applications from the beginning of the transitional periods, through the patent need not be granted until the end of this period the end of this period. If authorization for the marketing of the relevant pharmaceutical or agricultural chemical is obtained during the transition period, the developing country concerned must, subject to certain conditions, provide exclusive marketing rights for the product for five years, or until a product patent is granted whichever is shorter.

Subject to certain exceptions, the general rule is that obligations in the agreement apply to existing intellectual property rights as well as to new ones.

A published book,[23] entitle GATT Agreement or Dunkel Draft Treaty Its Impact on Agriculture, Industry, TRIPS and TRIMS and Drug Industry, adopted descriptive mythology in this writing and analysis critically both positive and negative side of the Final Agreement of GATT in relation to the developing country specially for India. This book

[23] D. Bhorali (1994), GATT Agreement or Dunkel Draft Treaty its Impact on Agriculture, Industry, TRIPS and TRIMS and Drug Industry, New Delhi, Mittal Publication.

incorporated almost all aspects of elements embodied in the GATT Agreement. He expressed the Trade related aspect of intellectual property rights (TRIPS) is an important issues of Final act of GATT agreement.

An interesting article about the TRIPS Agreement written by Dillip kumar Barua[24] in this book on the following manner that The TRIPS Agreement covers seven areas of intellectual property rights regime Patent rights covers the most area of it. The writer included the definition of patent right for this h he used the definition of Surendra J. Patel, the former Director of UNCTAD, Technology Division regarding patent right on page no.49. According to this definition, patent's is a rights granted by governments to inventors for a fixed period, to exclude other persons from limiting, manufacturing, using or selling a patented process.' Thus, it refers that patents means granting of monopoly rights to certain persons. Patel points out, '' the nationals of developing countries held no more than one percent (30,000in all) of the 3.5 million patents in the world. The developing countries were this plainly on the periphery of the world patent system. In comparison they represent 75% of the world population, 40% of the enrolment in higher education, 20to 25 percent of world GDP and 15 to 20 percent of world Industrial output, but only 1 percent of the world patent stock.

In the end, he concludes that it is now feared that the new intellectual property rights regime will increase the monopoly power of the multinationals in the field of Agriculture, Industry and transfer of technology and that too for a longer period now that a uniform patent term of 20 years has been provided against terms of patents varying from country to country in the lights of the country's development and technological interests.

[24] Dilip Kumar Barua (1994), New Intellectual Property Regime, above no 24.

2.2 Nepalese context

A published book[25] entitled 'seed of monopoly, impact of TRIPS Agreement on Nepal' (2000) adopted the descriptive content analysis for the study and it mainly focuses on the implication of TRIPS for food security, biodiversity, farmers' rights, indigenous knowledge, agriculture and consumers. The whole study is bounded for taking early initiatives in Nepalese economy in conformity of TRIPS Agreement of WTO. I t is the comparative study of Nepalese economy with developing and least developed countries in term of homogeneity

On the study, the authors discloses the number of findings, Firstly, he mentioned that the TRIPS Agreement is an agenda driven by the North, where the developed countries are the main demanders and the developing and least developing countries are at the receiving end. Moreover, this is one agreement, which was literally shoved down the throat of the Southern countries. Due to the inherent tendency of the TRIPS is to provide maximum benefits to the transnational countries (TNCS) by providing monopoly rights over the used of the global resources.

Secondly, the authors explained that the way TRIPS Agreement was negotiated it could hardly be called as a negotiating process. So he forced that developing countries were coerced and blackmailed in arguing to the TRIPS Agreement

Thirdly, the author viewed that the TRIPS Agreement contains a number of provisions, which are detrimental to the interest of developing countries in the following things'

[25] Ratnaka Adhikari, et al. (2000), Seed of Monopoly, Impact of TRIPs Agreement on Nepal, Pro-public and Action Aid Nepal, Kathmandu.

- It was decided that patent protection would be last for 20 years, which is much higher than protection provided for patent in any country.
- It envisaged that the life forms could be patented.
- It imposes hefty costs on resources strapped countries of the south help in term of its implementation.

Finally, the authors explained in favor of TRIPS agreement, which, if effectively utilized could help developing countries.

On the basis of the above findings, the writer dictates following recommendations,

- Anti competitive practices that are allowed by TRIPS agreement should prevented.
- Suigeneries law should be allowed to be used for the plant variety protection in indigenous and local farm communities, consistent with the convention on Biological diversity and the FAO international undertaking on plant genetic resources.
- The inherent conflicts between the convention on Biological Diversity (CBD) and the agreement on Trade related intellectual property Rights (TRIPS) must be resolved and changes in TRIPS must be made in favor of the south.
- Longer transition period should be provided to developing and least developed countries in order to set the country level for facilitation the3 process of granting patents.

- A team of experts and a multilateral fund should be created to provide technical and financial assistance for developing and least developed countries to set up fully equipped patent offices.
- Negotiation should be extended for a multilateral system of notification and registration of geographical indication to products other than wine and spirits.

A published book [26] (collection of articles) entitled ' WTO Globalization and Nepal' adopted the descriptive approach and written this book envisage mainly about the preparatory action before accession to WTO, weigh its pros and cons and provide the WTO cell of government the necessary input for expediting the process of accession to the WTO.

An interesting article of Ramesh Bikram Karki[27] entitled 'Review Of The Status of Nepalese Membership Procedure To The WTO' has written bout the issue relating to the Agreement On Trade Related Aspects Of Intellectual Property Rights regime, and that he found the following things in term of TRIPS in conformity with WTO, are; firstly, he say that Nepalese industrial property law are not able to yield expected results due to lack of effective enforcement mechanism and institutions.

Secondly, he found that Nepalese Intellectual Property Rights (IPRS) law does not cover all areas of trips. He showed that geographical

[26] Ananda P. Shrestha (2001) WTO, Globalization and Nepal, Katmandu: NEFAS Publication, Modern Printing Press.

[27] Ramesh Bikram, Karki, (2001) WTO, Globalization and Nepal, Katmandu: NEFAS Publication, Modern Printing Press.

indication, lay out design (topographies) of integrated circuits, protection of undisclosed information, control of anti-competitive practices in contractual licenses, provision of injunction, boarder measures etc are to be covered by the patent, design and trademark Act, 1965.However,a Draft of industrial property rights law was prepared in assistance of the world intellectual property organization in 1994. Moreover due to the lack of effective administrating institution, this act has not been enforced effectively.

On the basis of the above findings the author has given the following recommendations;

- Nepal needs to build institutions and enact/ amend intellectual property rights law to bring it in conformity with the provisions of TRIPS.
- Nepal deserves to get technical assistance to improve her intellectual property rights law from an institution like the WTO and its developed member countries in according with the WTO provisions.

The authors[28] in the book of "Nepal in the WTO Livelihood and Food security to provide inputs to the government in the policy development process and their implementation perspective'', adopted the descriptive methodology of study and written this book mainly for keeping the view The authers[1] in the book of ''Nepal in the WTO Livelihood and Food security to provide inputs to the government in the policy development process and their implementation and to educate the farming community and the other stakeholders about the possible

[28] Dr. Hiramani Ghimire, et al. (2004), Nepal in the WTO Livelihood and Food Security Perspectives Katmandu: SAWTEE and AAN.

implications of Nepal's commitments at the WTO, concerning trade related aspects of intellectual property rights (TRIPS).

The writers found in their writing for implementing the provisions of TRIPS that it could be a daunting task for Nepal experiences elsewhere clearly show. In order to facilitate the implementation of its Agreement, developed country members shall provide, on request and on mutually agreed terms and conditions, technical and financial co-operation shall include assistance in the preparation of laws and regulations on the protection and enforcement of Intellectual property rights (IPES) as well as on the prevention of their abuse, and shall include support regarding the establishment of reinforcement of domestic offices and agencies relevant to these matters including the training of personnel. They suggest that Nepal needs to take the advantage of this provision and take support from developed members in the areas of formulation and enforcement of TIRPS relate laws and regulations.

Regarding the agreement of trade related aspect of intellectual property rights (TRIPS) authors have given the following recommendations on the protection the interest of the farmers.

- Identify and document all biodiversity products in the country.
- Ensure that the proposed plant variety protection and farmer rights act encompasses the following principles.
  - Farmers' right to save, reuse and exchange and sale (in unbranded form) seeds.
  - State has the sovereign right over their own natural resources including their genetic resources.

- Farmers' rights arising from the plant, present and future contribution of farmers in conserving, improving and making available plant genetic resources and recognize in order the allow farms and their communities, in countries in all regions of the world to participate fully in the benefits derived at present and in the future, through plant breeding or other scientific methods.
- Biological diversity including genetic diversity shall be conserved, enhanced and sustainability used. Patents and other IPRS shall be supportive of and not run counter to these objectives.
- Access to genetic resources shall be subject to prior informed consent. Where granted, access shall be on mutually agreed terms.
- Benefits arising from the commercial and other utilization of genetic resources shall be shared in a fair equitable way upon mutually agreed terms, multilaterally or on a bilateral basis.
- The result of R&D arising from the utilization of genetic resources shall be shared in a fair and equitable way on terms mutually agreed upon. Access to, and transfer of technologies that make use of its components and to technologies that make use of genetic resources shall and favorable terms.
- Indigenous and farming communities' knowledge innovation and practice to plant genetic resources

shall be protected and encouraged. Special measures shall be takes to ensue this, including mechanisms of free and informed consent.

- Lobby at the international level to remove patents on life forms.

A published book [29] (2002) on titled National plant Genetic Resources policy for food and agriculture: A case study of Nepal" studied the national policy gaps, constraints, and current policy situation, policy formulation process and key issue, concern and policy consideration for PGRFA policy A descriptive methodology has applied in the writing of this study. From the study, the writers concluded the following things.

Despite the importance of agricultural in the national economy and predominance of informal seed supply systems in the farmers' livelihood, plant genetic resource convention for food and agriculture has not been recognized as an important part of biodiversity conservation in Nepal.

Nepal presently locks overall policy for the sustainable utilization and conservation of PGRFA in Nepal.

Existing draft legislation such as Access and benefit sharing and other policy related to PGRFA needs to be reviewed, adopted and harmonized in accordance with the national needs and requirements of WTO /TRIPS, CBD and the international Treaty on PGRFA.

The country also locks expertise and appropriate institutional arrangements for developing the policies, strategies action plans and programmers and implementing them. In order to minimize the past

[29] Perendra Gauchan , Birral K. Baniya, Madhusudhan P. Upadhyay and Anil Subedi (2002), "National plant Genetic Resources policy for food and Agriculture. A case study of Nepal, NARC, LI-BIRD and IPGRI. Kathmandu Nepal.

weakens in the policy formulation; the writers have refused the following recommendations.

The future development of potential PGRFA policy should be guided by the realistic research and consultation process.

Action participation of important stakeholder form both public and private INGO and NGO sectors including the farming communities the custodian of genetic resources is essential.

Co-ordination and flow of information needs to be improved through both horizontal- between-different ministries and sectors and vertical between the policy making and field levels at which activities are implemented.

CHAPTER III

TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS) AND ITS PROVISION ON WORLD TRADE ORGANIZATION (WTO)

3.1 The main features of TRIPS Agreement

3.1.1 Standards

In respect of each of the main areas of intellectual property covered by the TRIPS agreement, the agreement sets out the minimum standard of protection to be provided by each member. Each of the main elements of protection is defined, namely the subject-matter to be protected, the rights to be conferred and permissible exceptions to those rights, and the minimum duration of protection. The Agreement sets these standards by requiring, first, that the substantive obligations of the main convention of the WIPO, the pairs conventions for the protest ion of industrial property (Paris convention) and the Berne Convention for the protection of Literary and artistic works (Berne Convention) in there most recent various, must be complied with. With the exception of the provisions of the Berne Conventions on moral right, all the main subjective provision of these conventions are incorporated by reference and thus become obligations under the TRIPES agreement between TRIPS Member countries. The relevant provisions are to be found in Articles 2.1 and 9.1 of the TRIPS Agreement, which relate, respectively, to the Paris Convention and to the Berne Convention. Secondly, the TRIPS Agreement adds a substantial number of additional obligations on matter where the pre-existing conventions are silent or were seen as being inadequate. The TRIPS Agreement is thus something referred to as Berne and Paris-plus agreement

3.1.2 Enforcement

The second main set of provisions deals with document procedures and remedies for the enforcement of intellectual property rights. The Agreement lays down certain general principles applicable to all IPR enforcement procedures. In addition, it contains provisions on civil and administrative procedures and remedies, provisional measures, special requirements related to borders measures and criminal procedures, which specify, in a certain amount of detail, the procedure and remedies that must be available so that right holders can effectively enforce their rights.

3.1.3 Dispute settlement.

The Agreement makes disputes between WTO members about the respect of the TRIPS obligations subject to the must WTO'S dispute settlement procedures.

In addition the agreement provides for certain basic principles, such as national and most-favored-nation treatment and some general rules to ensure that procedural difficulties in acquiring or maintaining IPRS do not nullify the substantive benefits that should flow from the agreement. The obligation under the Agreement will apply equally to all member countries, but development countries will have a longer period to phase them in. special transition arrangements operate in the situation where a developing country does not presently provide produce patient protection in the area of pharmaceutical.

The TRIPS Agreement is a minimum standards agreement, which allows members to provide more extensive protection of intellectual property if they so wise. Members are left free to determine the appropriate method of implementing the provisions of the Agreement within their own legal system and practice.

3.2 General Provision

As in the main pre-existing intellectual property conventions, the basic obligation on each member country is to accord the treatment in regard to the protection of intellectual property provided for under the Agreement to the person of other member. Article 1.3 defines who these persons are. These persons are referred to as "nationals" but include persons, natural or legal , who have a c lose attachment to other members without necessarily being nation or legal, who have a close attachment to other members without necessarily being nationals. The criteria for determining which persons must thus benefit from the treatment provided for under the Agreement are those laid down for this purpose in the main pre-existing intellectual property conventions of WIPO, applied of course with respect to all WTO members whether or not they are party to those conventions. These conventions are the Paris convention, the Berne convention, international convention for the protection of performers, produces of phonograms and Broadcasting organizations (Rome convention), and the treaty on intellectual property in respect of integrated circuits (IPIC Treaty).

Article 3, 4 and 5 include the fundamental rules on national and most-favored-nation treatment of foreign nationals, which are common to all categories of intellectual property covered by the Agreement. These obligations cover not only the substantive standards of protection but also matter affecting the availability, acquisition, scope, maintenance and enforcement of intellectual property the agreement. While the national treatment clause forbids discrimination between a Member's own nationals and the nationals of other members, the most-favored-nation treatment clause forbids discrimination between the nationals of the

members. In respect of the national treatment obligation, the exceptions allowed under the pre-existing intellectual property conventions of WIPO are also allowed under TRIPS. Where these exceptions allow material reciprocity, a consequential exception to MFN treatment is also permitted (e.g. comparison of terms for copyright protection in excess of the minimum term required by the TRIPS agreement as provided under Article 7(8) of the Berne Convention as incorporated into the TRIPS Agreement). Certain other limited exceptions to the MFN obligation are also provided for.

The general goals of the TRIPS Agreement are contained in the Preamble of Agreement, Which reproduces the basic Uruguay Round negotiating objectives established in the TRIPS area by the 1986 Punta del Este Declaration and the 1988/89 Mid-Term Review. These objectives include the reduction of distortions and impediments to international trade, promotion of effective and adequate protection of intellectual property rights, and ensuring that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade. These objectives should be read in conjunction with Article 7, entitled "Objectives", according to which the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in the manner conducive to social and economic welfare, and to a balance of rights and obligations. Article 8, entitled "Principles", recognizes the rights of members to adopt measures for pubic health and other public interest reasons and to prevent the abuse of intellectual property rights, provided that such measures are

consistent with the provisions of the TRIPS Agreement. (The general legal provision of TRIPS are explained in annex:1)

3.3 Scope of the Agreement

Intellectual property right (IPPS) covered by IRIPS are divided into seven categories. Brief description of these is given in the following section.

3.3.1 Patents

Patent, according to the United Nations definitions is a legally enforceable right granted by a country's government to an inventor and to other persons deriving the rights from the inventor, for a limited number of years. A patent excludes other persons from manufacturing, using or selling a patented product or from utilizing patented method or process. For disclosing the invention, the government grants the patent holder. However, members shall provide for the protection of plant varieties there by patents or by an effective suigeneris system or by any combination there of.

The representative of Nepal said that patents designs were covered by the Patent, Design and Trademark Act. 1965. as indicated in the action plan on the implementation of the TRIPS Agreement. The Act would be brought in to conformity with the provisions of the TRIPS agreement by the Industrial Property (Protection) Act under preparation. The representative of Nepal declared that, as a WTO Member, Nepal would be entitled to the flexibilities provided in the Doha Declaration on the TRIPS Agreement and Public Health. Under the present legislation, any person wishing to obtain exclusive rights over and invention should register a patent in the Department of Industry by Filing an application. Upon its receipt, The Department would conduct investigations or studies

to ascertain whether the subject matter mentioned in the application was an invention and thereafter decide whether or not to register a patent. Patents were available for all kinds of products and processes that fulfill the patentability requirements without any discrimination as to the technological field or invention. The title of the patentee to the patent registered under the Act remained valid for a period of seven years at a time, with a possibility of two renewal periods of seven years. The patent holder had the exclusive right to transfer of license, a patent and to request the third person to stop infringement, and could claim the compensation. The current legislation did not include provision for the protection of prior user rights nor for compulsory licensing.

3.3.2 Copyrights and Related Rights

This part of the agreement covers copyright and other rights neighboring on copyrights such the rights of performing artists in their performance, the rights of produces of phonographs (i.e. sound rewordings) in their phonographs, and the rights of the rights of the broadcasting organizations in their radio and television programmes.

Nepal representative said that the Copyright Act 2002 repealed the Copyright Act 1965 to comply with the provision of the TRIPS Agreement and the Berne Convention. If Nepal received the necessary technical assistance, a Copyright information Center would be established in December 2004.

3.3.3 Trademarks

A trademark is defined as any sign or any combination of sings that distinguishes the goods or service of one undertaking from those of other undertakings. Such signs, in particular words inducing personal names, letters, numerals, figurative elements and combinations of colors as well

as any combination of such signs are eligible for registration as trademarks. Excursive privileges to derive commercial benefits from the invention for a specific period (Adhikari et.al 2001)

Patent is provided if the following three conditions are met.

- The invention is novel
- The invention has followed an inventive step and
- The invention is commercially applicable

There are three permissible exceptions to the basic rule of patents. The members may exclude from patentability the following.

- Inventions that are a threat to the morality or are dangerous to humans, plants and animals lives or seriously prejudicial to the environment.
- Diagnostic, therapeutic and surgical methods for the treatments of humans or animals.
- Plants and animals other than micro-organism and essentially biological processes fro the production of plants or animals other than non biological and microbiological processes.

The owner of registered trademark is granted exclusive right to use in the course of frade the registered trademark and third parties not having the consent of the trademark holder are not allowed to use identical or similar signs for similar goods or services.

The representative of Nepal said that in accordance with the Legislative Action Plan. In 2005 the Patent Design and Trademark Act 1965 amended in 1987, would be replaced by a new Industrial Property (Protection) Law consistent with the TRIPS agreement. At present any person wishing to have trademark of his business registered should be

should submit to the Department of Industry and application according to the specimen from indicated in Schedule 1(c) of the Act, Along with four copies of such trademark. After completing this process of department would register such trademark in the name of the applicant and then issue a trademark certificate. If the trademark file for the registration was considered to hart the prestige of any individual or institution, or adversely affect public conduction or morality, or u undermine the national interest, of the reputation of the trademark of any other person, or the proposed trademark was found to have already been registered in the name of another person, the registration could be denied. Service marks were also subject to the same rule. The act provides service marks were initially registered for a period of seven years, and could be renewed for an indefinite number of years after every seven-year interval.

3.3.4 Geographical Indications

A geographical indication identifies a product as originating in a particular place to which its quality, reputation or other characteristics are essentially attributable. Examples are champagne produced in champage region of France, Scotch whisky manufactured in Scotland, Ceylon tea produced in Sri Lanka and Darjeeling tea produced in Darjeeling, India.

The representative of Nepal said that the present legislation did not cover geographical indications. In accordance with the action plan on the implementation of the TRIPS agreement reproduced the protection of geographical indications would be included when drafting new Act.

3.3.5 Industrial Designs

Industrial designs cover the features concerning the look of an article, for example the shape, ornamentation, pattern, and configuration

etc. TRIPS oblige members to provide for the protection of independently created industrial designs that are new or original. It has been clarified

that novelty or originality may not be present if the design does not significantly differ from known designs.

The owner of the protected design will have the right to prevent the making selling, or importing of articles haring a copy of that design for commercial purpose without the consent of the party to whom protection in provided.

The representative of Nepal said that the industrial designs were covered by the patent, Design and Trademark Act, 1965. As indicated in the action plan of the implementation of the TRIPS agreement, the Act would be brought into conformity with the provisions of the TRIPS Agreement by the Industrial Property (Protection) Act under preparation. Under the present legislation, any person wishing to protect the design of any article should submit an application to the Department of Industry, which would register the design in the name of applicant and issue a certificate. In case such design hurts the prestige of any institution, or adversely affects public conduct or morality, or undermines the national interest, or in case such design had already been registered in the name of any other person, the registration could be denied. Industrial designs were originally registered for a period of five years and could be renewed for two more terms at an interval of five years.

3.3.6 Layout Designs of Integrated Circuits

The agreement requires members of protect the layout designs of integrated circuits in accordance with the Treaty on intellectual property

in Respect of Integrated circuits (IPIC Treaty) negotiated under the auspices of world intellectual property organization (WIPO) in 1989.

An 'integrated circuit' means a product, in its final form or an intermediate from, in which the elements at least one of which is an active element, and some or all of the inter connections are integrally formed in and or on a piece of material and which is intended to perform an electronic function. A layout design is defined as the three dimensional disposition of the elements, at least one of which an active element, and of some or all of the inter connections of an integrated circuit or such a three dimensional disposition prepared for an integrated circuit intended for manufacture.

Reproduction or importing, selling or otherwise distributing for commercial purpose of the profited layout design, an integrated circuit incorporating a protected layout design or an article incorporating such and integrated circuit without the authorization of the right holder are illegal.

The representative of Nepal said that the present legislation did not cover the protection of layout designs of integrated circuits. In accordance with the action plan on the implementation of the Trips Agreement, the protection of layout designs of integrated circuits would be included in the new industrial property (protection) Act to be promulgated by December 2005.

3.3.7 Undisclosed Information

The protection of undisclosed information relates to secret information with a person or an enterprise, e.g. Trade secrets, or to information lodged with the government in the case of pharmaceutical or agricultural products. The protection applies to information that is secret,

which has commercial value because it secret and has been subject to reasonable measures to keep it secret. A member must provide to person or enterprises the possibility of preventing the disclosure, acquisition or use of information within their control without their consent in a manner contrary to honest commercial practices.

3.3.8 Curbing anti-competitive licensing contracts:

The owner of a copyright patent or other from of intellectual property right can issue a license for someone else to produce or copy the protected trademark, work, invention design etc. the agreement recognizes that the term of a licensing contract could restrict competition or impede technology transfer. It say that under certain conditions, governments hare the right to like action to prevent anti-competitive licensing that abuses intellectual property rights. It also says government must be prepared to consult each other on controlling anti-competitive licensing.

3.4 Minimum Standards of Protection

TRIPS set out the minimum standards of protection. Countries are allowed to provide higher degree of protection. However, the two fundamental principles of the WTO, national treatment and most fronted nation (MFN) treatment must be respected. In the Uruguay Round negotiators members of the GATT agreed to make their domestic legislation confirm with TRIPS agreement. Developing countries were given five year's time lag for implementation i.e. they had to have a TRIPS compliant legislative by 1 January 2000. LDC was allowed to implement such a legislative by January 2006.

3.5 Nepal's Commitments

The table given below is the action plan for the implementation of TRIPS submitted by the government of Nepal in the report of the working party.

Table 1.

Action Plan for Implementation of the Agreement of Trade Related Aspects of Intellectual property protection

Action	Implementation
Approved legislation: Copyright Act, 2002 Patent, Design, and Trademark Act, 1965 Administration of Justice Act, 1991 Appellate Court Rules, 1972 Summary procedures Act, 1972 Participation in: WIPO (since 1997) Paris Convention (since 2001)	Completed
Establish MFN and national treatment in all areas covered by TRIPS, in particular in the following areas: Extension in the copyright Act, 2002 of protection of foreign works on a full nation testament basis; and The elimination of discrimination in fees charged foreign vs. domestic applications	Upon accession
Establishment and strengthening Nepal copyright registrar office	No later than 1 January 2005
Establishment of trademark information Centre Industrial Design information center/ Industrial patent information center/	No later than 1 July 2005

And layout-designs information center/	
Approval of: Industrial Property (Protection) Act Participation in: Berne Convention Rome Convention Treaty on Intellectual property in Respect of integrated Circuits	No Later than 1 January 2006
Training of personnel involved in copyrights protection, trademarks protection, protection of industrial design, protection of patents, protection of undisclosed information, customs officials and police Orientation of judges and lawyers Computerization and networking of patent office Computerization of intellectual property office Reorganization and establishment of Intellectual property offices Developing rules, regulations and work manuals Enhancing public awareness on the protection of intellectual property rights]full implementation of the agreement on Trade-related Intellectual Property Rights	No later than 1 January 2007

Source: WTO 2003

CHAPTER IV

STATUS AND KEY DEVELOPMENT SECTORS OF INTELLECTUAL PROPERTY IN NEPAL

4.1 Intellectual Property Administration in Nepal

Nepal has two IP offices for administration of intellectual property rights. It is lagging behind in respect of development of intellectual property system. Intellectual property is divided in major two parts: Copyrights and Industrial Property. She has two IP offices namely Office of the Copyright Registry for the administration of copyright and Department of Industry for the administration of industrial property. She does not have specific policy guidelines regarding interaction of IP rights with development policy.

4.1.1 Intellectual Property Laws

Intellectual Property related law came into enforcement in Nepal in 1937 with promulgation of Patent, Design and Trademark Act. Provisions for the protection of industrial property of the nationals were included in this first act. Patent, Design and Trademark Act, 1965 replaced the first Act and is still in force. Present Act also provides intellectual property rights in respect of industrial property of foreign origin as well. This Act, having undergone an amendment in 1987, regulates present industrial property system of Nepal. In respect of another important field of IPR, the right over the artistic and literary work which is popularly known as copyright comes into the legal setup only in 1965 by enactment of Copyright Act, 1965. The enactment of new Copyright Act, 2002, compatible with various international conventions and treaties as well as national and international needs and practices made significant

improvement in legal arrangement for protecting the rights of literary and artistic works.

4.1.2 The Industrial Property Act, 1965

The Patent, Design and Trademark Act, 1965 gives the definition of patent, design and trademark. Procedures for application, examination and registration are broadly stated. Areas of protection and limitations of the right of the owner are defined in the Act. The other main provisions made in the Act are:

- Registered patent and trademark shall be valid for a period of seven years.
- Registered design shall be valid for five year for the d ate of registration.
- Registered trademark should be renewed within 35 days from the date of expiry.
- The patent and design, registration can be renewed only for another two terms.
- There are provisions for penalty and compensation against violation of rights and infringement.

4.1.2.1 Shortcomings in the Existing Industrial Property Act

- The rights of the owner conferred by the protection are inadequate.
- The Act does not cover all aspects of industrial property such as integrated circuits or layout design, utility model, different kinds of marks, repression of unfair competition as well as various new issues emerged in the IPR regime.

- There is lacking in defining proper terminologies of industrial properties.
- There is a lack of opportunity for opposition and hearing before the registration or grant of a particular industrial property. Although provision of complaints for cancellation after registration is provided in the Act but procedure to this regard in not clearly mentioned.
- There is dissatisfaction among the IP holder on enforcement provision of the Act. Penalty for infringement of rights is very nominal and provisions for confiscation of infringement-related goods and compensation are not clearly defined. There are no criminal procedures and Custom measures for protecting industrial property rights.
- Examination and search criteria for the grant of a particular industrial property are not well stated.
- Certain treatments to foreigners and local nationals are different.
- Existence of self-depriving situation relation to trademark and patent application for the sake of national applicant.

(Source: National Study on Intellectual Property for Small and Medium-sized Enterprises Nepal, WIPO Seminar January 27 and 28, 2005)

Due to these reasons the Act does not appear compatible with the provisions of TRIPS and the Paris Convention for the Protection of Industrial Property. In view of these shortcomings, a new Act is under the

process of legislation. The WIPO has provided technical support to draft the law compatible with me requirement of TRIPS agreement.

4.2 Copyright Act

Previous copyright Act had some shortcomings in respect of protecting rights of creation for artistic and literary works. It was not compatible with the provisions of Berne Convention, TTIPS agreements and other international conventions and treaties related to copyright related laws. It was a must to register to confer the right over the ones' creative work. Terms of copyrights and performing rights were not clearly defined and all types of rights like the rights to performers, broadcasters sound recorders etc. were not included in that Act. Provision of enforcement was not sufficient and was unclear. To address these shortcomings in the Act, a new Copyright Act was promulgated in 2002. This act is based on WIPO model law in this respect and has been drafted with the technical assistance of WIPO. Private organizations in this sector hand played significant role in the enactment of this new Act, which is more compatible with international practice and will be able to address the needs of copyright holder of the country.

4.2.1 Main Provisions of Copyright Act, 2002

The act has clearly defined various terms of copyrights and related rights, Rights over different creative works as well as economic rights, moral rights, performers' rights, broadcasters' rights and rights of sound recorders are recognized and are well defined in the Act. As per the Act economic and moral right of authors of creators are protected from the date for publishing to 50 years. Various limitations and provisions for transfer to rights are also incorporated in the Act. The Act also de fines violations and has better enforcement measures for the violation of rights. To protect the rights holders from infringement of their works and

violation of rights, the Act has applied civil and criminal remedies as well as border measures. There are provisions for fines of 10 thousands Rupees to 200 thousand Rupees and imprisonment of six months to one year for infringement or violation of copyrights of related rights. As a border measure customs officers can stop imports of such goods. The act also mentions the role of copyright registrar and royalty collection societies. For effective functioning for this act necessary rules and procedurally manuals as well as administrative arrangements are needed. Due to lack of these, the copyrights act is not yet in full enforcement.

4.3 Present Status of Industrial Property Administration

Records of the Industrial Property Section of DOI show that there are total 21733 marks, 47 industrial designs and 57 patents registered till fiscal year 2061/2062. Only patents for invention, industrial design and trademarks (including service marks) are dealt as industrial property. Other types of property like utility models, various types of marks as group marks, certification marks, geographical indication as well as appellation for origin are not covered by the administration of industrial property. Regarding the Number of registered marks move than 38% is foreign origin following table shows the trends of foreign and domestic origin of marks.

Table No. 2

Registration of industrial Property (Trademark, Patent and Design)

Fiscal Year	Trademark			Patent			Design		
	National	Foreign	Total	National	Foreign	Total	National	Foreign	Total
Total Since B.S. 1994 to 2048/049	5720	2880	8600	16	16	32	3	15	18
2049/050	512	170	682	-	4	4	-	-	-
2050/051	369	244	613	-	-	-	-	1	1
2051/052	393	471	864	1	-	1	-	1	1
2052/053	403	617	1020	1	1	2	-	1	1
2053/054	423	411	834	-	2	2	-	2	2
2054/055	442	377	819	-	2	2	-	2	2
2055/056	429	454	883	-	-	-	1	1	2
2056/057	574	588	1162	-		-	3	-	3
2057/058	678	485	1163	-	-	-	-	1	1
2058/059	660	518	1178	1	2	3	4	1	5
2059/060	804	557	1361	5	2	7	-	5	5
2060/061	1255	396	1651	2	2	4	0	5	5
2061/062 FNM	626	277	903	0	0	0	1	0	1
Total Since 1994 B.S. to 2061/062 FNM	13288	8445	21733	26	31	57	12	35	47

Source: Industrial Statistics, FY 2061/62

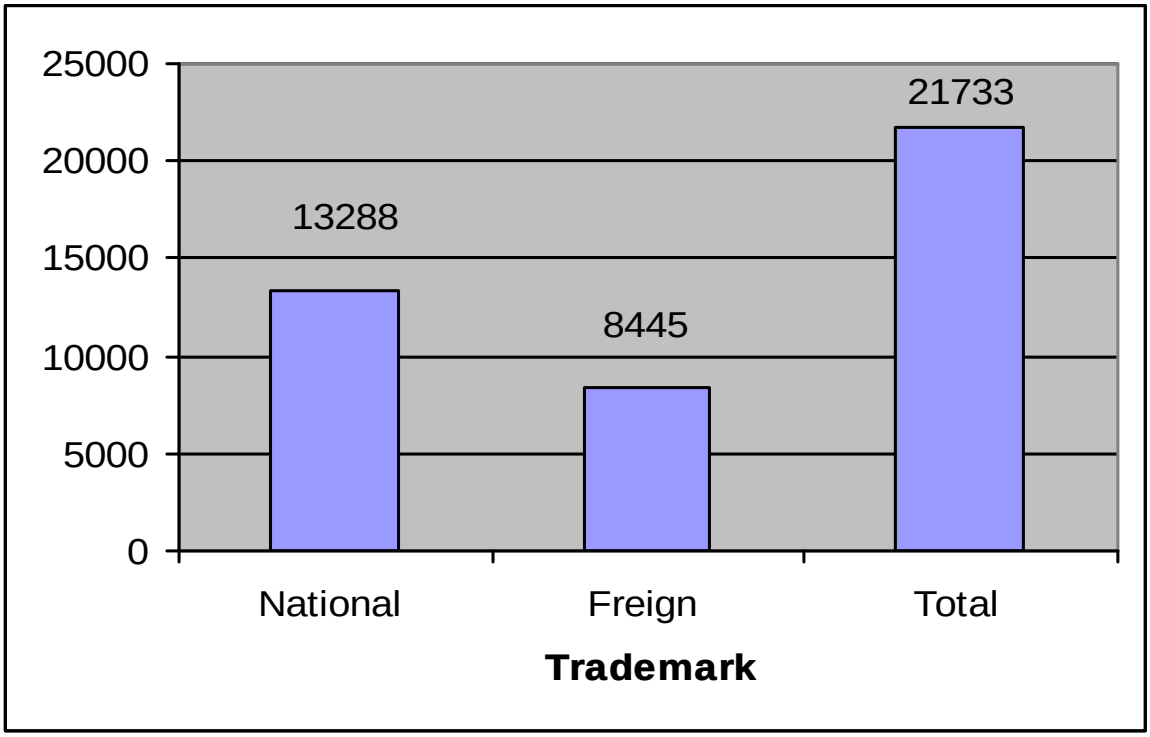
J The following chart –I shows the number of trademark registered in department of industry. There is hopeful presence in foreign marks registration. There are 8445 foreign trademarks registered in Nepal.

The total number of registered marks is 21733 out of which 13288 are from home country i.e. national.

- Comparison with other Industrial Property the industrial property section more engaged in administration of trademark. Some people gave the name Trademark section to the industrial property section since they found the administration of patent and design is in weak situation.

Chart – 1

Registered Trademarks in Chart

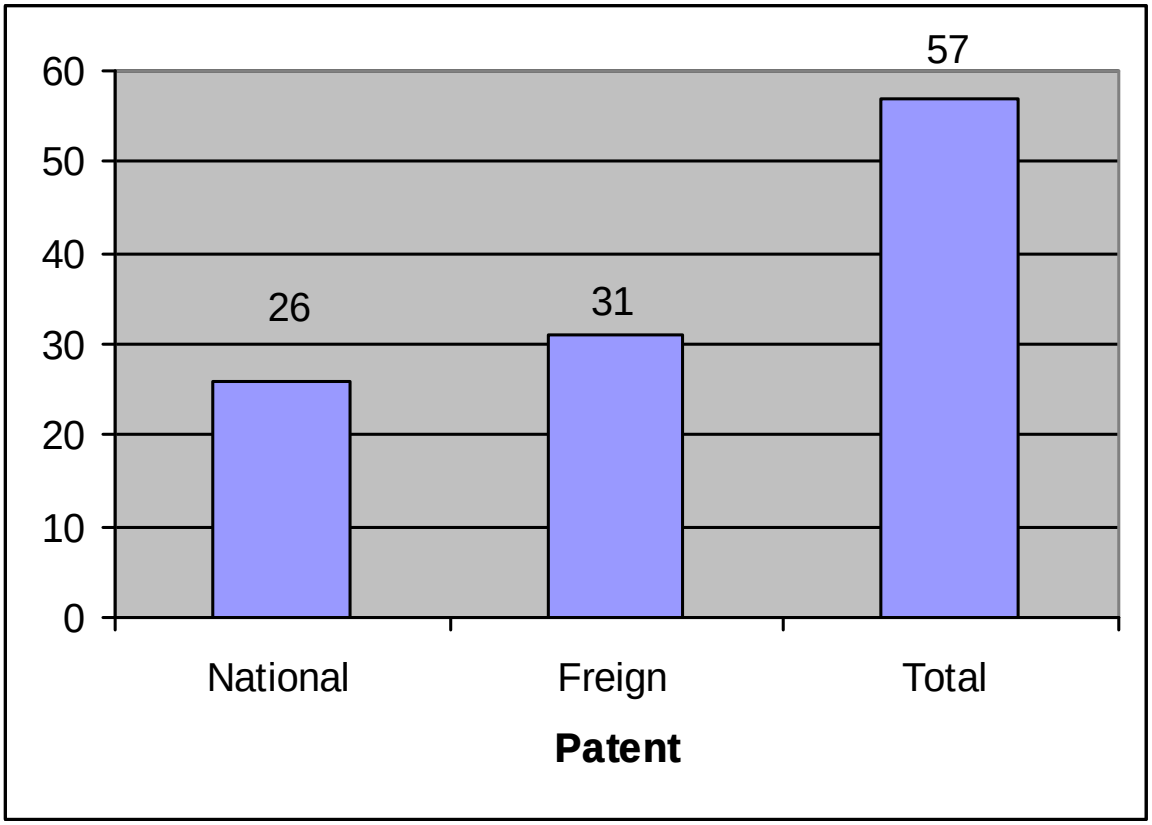


- The following chart shows the glance picture of patent registration in our case. The number of registered patent is very low. Up to fiscal year 2060/61, only 57 patents registered in Nepal. Chart – 2 shows the number of

national patent is lower than the foreign. But the total number is not satisfactory. In some fiscal year even a single patent was not registered.

Chart – 2

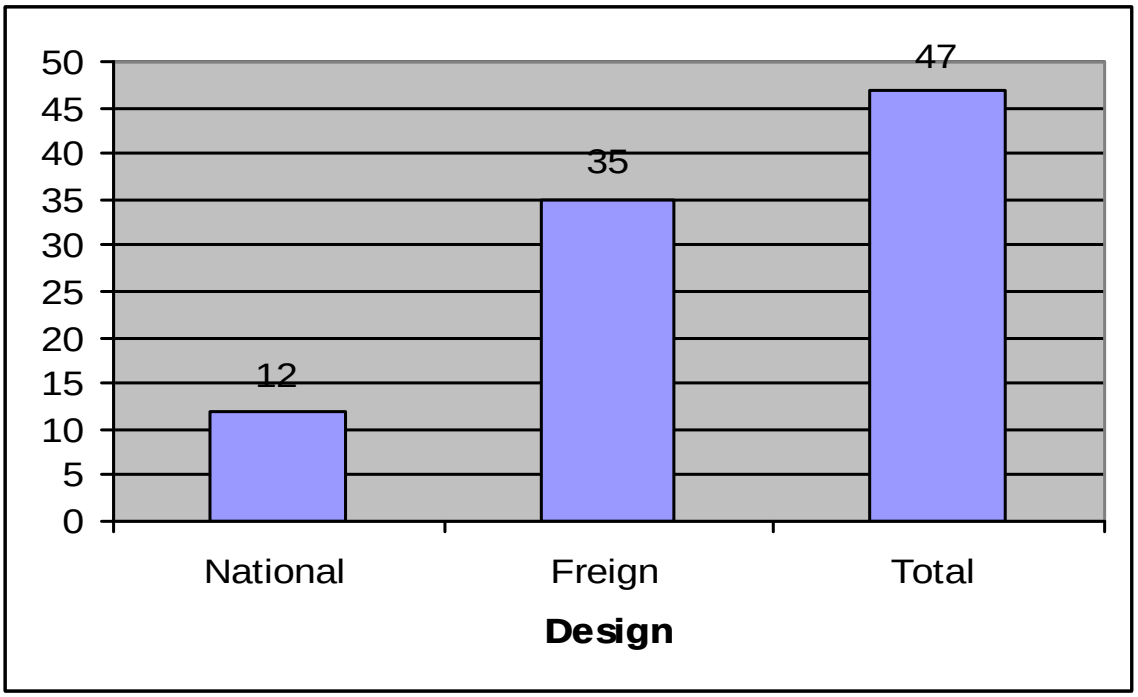
Registered Patent in Chart



- The Chart -3 presents the picture of design registration in the Department of Industry. Up to now 47 industrial designs are registered. Out of them 35 are from foreign and 1 2 from national. The figure leads to the unsatisfactory picture of innovative designs.

Chart – 3

Registered Industrial Design



4.4 International Conventions, Treaties and Organization:

4.4.1 Nepal is a member of the following international treaties and conventions:

- WIPO (It is explained in annex: 3) establishing convention – Nepal signed the instrument of Accession in 1996.
- Paris convention for the protection of industrial property 1883 (as amended in 1979) – Signed the instrument of Accession of 16 March 2001.
- NICE classification system for the registration of marks (trademarks, services marks) is being followed although Nepal has not yet signed the agreement.
- Preparations are in progress for acceding to Berne Convention for the protection of Literary and Artistic Works, Patent Cooperation

Treaty, 1970 and Madrid Agreement concerning the international Registration of Marks and the Protocol relating the agreement.

4.5.2 World intellectual property organization (WIPO) (It is explained in annex: 3) is contributing significantly for the development of intellectual property system of Nepal. It has sent different expert mission to Nepal for strengthening and modernization of intellectual property system and has provided opportunity to Nepalese policy makes, officials, and business leaders to participate in the IP related International forums. The WIPO has extended assistance especially in following important areas.

- Technical assistance for drafting the new copyright act and regulation and industrial property protection Act,
- Training opportunity for IP officials, lawyers, judges, police, custom officials in aboard,
- Organizing of various national seminars and workshops for enhancing awareness in the country,
- Providing computers and other office-equipment and WIPO Net facilities, and
- Automation of industrial property administration, etc.

There is a very low rate of cases filled against infringement and violation of IPR. In copyright matters, cases are handled directly by police offices so that the statistics on the number of cases of filed are not available. As per media reports, the police have taken action in few cases of unauthorized copies and duplicates of audiocassettes and CD's of music and feature films. As regards the industrial property, the department of industries handles cases against the infringement and violations. District administration offices, police and customs offices also provide necessary assistance to the department in handling these cases.

Following table shows the data of cases filed and decisions made by the Department regarding the infringements and violations of IP rights.

Table – 3

Cases file and Decisions

Year	2000	2001	2002
Case filed numbers	41	29	47
Decision numbers	7	14	13

The data indicates a very low number of cases being finalized in the department. In the table, the finalized cases depicted in the table few cases that are settled on mutual agreement. The department is short of manpower with sufficient knowledge and expertise in IP field to handle these matters. Also, there are no standard manuals and defined working process to handle these very sensitive cases.

4.5 Analysis IP Services

4.5.1 Demand of IP Services

The awareness of intellectual property rights among the intellectual circles in increased after the emergence of WTO. Nepal lags behind in the economic and technological development and accordingly the demand for intellectual property service on concerned IP service providing offices is quite low as expected. There are 152627 small, medium and cottage industries registered in DCSI, CSIDB, and DOI till 2002. 71425 commercial enterprises are registered in DOC and 7064 cooperative firms are registered in other concerned offices. The total number of enterprises is 231390. Other kinds of enterprises are registered with different authorities and there are a large number of unorganized business activities. 21733 trademarks are registered, which is about 8% of total registered

numbers of enterprises. If the foreign origin marks are not included, this figure reduces to only about 4%. While comparing annual growth rate, it is seen that whereas about 15000 new enterprises are registered each year, only about 1000 trademark applications are filled. It was not possible to get the numbers for other industrial properties, patents and design applications and registrations for comparison. Thus, in Nepal the IP system has not been able effectively penetrate the market. This highlights the urgency for development and enhancing the effectiveness of IP system in Nepal to bring the SMEs under the IP regime. Apart from applications for new registration there are on an average 500 applications for renewal, 250 applications for recordable change and endorsement and about 30 to 50 cases filled against infringement and violation of trademark rights in the DOI.

4.5.2 Cost of IP Service

To cost borne by an enterprise in registering and renewal of trademark is broadly of two types, direct cost and indirect cost. The direct cost refers to the government fees as mentioned in the table. Indirect cost is the expenditure incurred by the entrepreneurs on traveling, lodging/boarding as well as for preparing the documents for filing the application in DOC. This cost is calculated on the present rate of transportation (bus fare) and general lodging and food rate of the market and the time for completion of the work is based on the department in public notice in this respect. As per this notice the work of registration of a trademark will be completed within the 5 days and renewal and other endorsement related work would be completed within 3 days of filing the application. Thus, outstation applicants have to stay in Kathmandu for a minimum of 5 days for registration and 3 days for renewal of trademark. Also, they have to spend

minimum 2 days enroot. On the basis of this the cost of trademark service for entrepreneurs of out of Kathmandu valley is as follows.

Table – 4

Direct and Indirect Cost for IP Service

For Registration

Direct cost	Rs.	Indirect cost	Rs.
Application fees	500	Transport	1000
Registration fees	1500	Lodging and foods for 7 days	3500
		Label print, photo coping etc.	500
Total	2000	Total	5000

For Renewal

Direct cost	Rs.	Indirect cost	Rs.
Renewal free	1400	Transport	1000
		Lodging and foods for 5 days	2500
Total	2000	Total	5000

Source: Industrial Property Section, DOI

Table – 5

Revenue Accumulation to the Department of Industries

(In NRs.)

Fiscal Year	Trademark, Patent, Design registration	Trademark Renewal	Total
2051/052	757125	313088	1070213
2052/053	862987	151814	1014801
2053/054	1946071	570093	2516164
2054/055	2093358	740411	2833769
2055/056	2621943	339050	2960993
2056/057	3041039	552072	3593111
2057/058	2856925	607877	3464802
2058/059	2772594	2863359	5635953
2059/060	3121092	2009975	5131067
2060/061	288247	1260237	4148484
2060/61 FNM	2076411	1046671	3123082
2061/62 FNM	2388810		2388810

Source: Industrial Statistics, FY 2061/62

The revenue generated from registration and renewal of industrial property was highest in the 2058/59 fiscal year. It was lowest in the 2052/53 fiscal year.

4.6.2.1 The cost for registration of trademark as seen above is about Rs 7000 and for renewal about Rs 5000. The entrepreneurs of Kathmandu valley do not need spend most of the indirect cost for acquiring trademark service. Thus, the cost variation for the

entrepreneurs of Kathmandu valley ad outside the valley is quite high. This cost in monetary and time terms is not a burden for the large and medium sized enterprise and some of these enterprises make many applications and own more than hundred trademarks. But the enterprises of small and micro level especially those from outside the Kathmandu valley feel the burden of this cost. This is one of the important reasons for the low number of IP applications and registrations.

4.6.2.2 The cost of design and patent services, both direct and indirect, can be assumed to be slightly higher than the trademark service. At present no professional service is available for preparation of patent document etc and the applicants have to do it themselves. Similarly, for cases of infringement and violation of rights the costs vary from case to case.

4.6.2.3 These costs, especially the time cost can be low if IP service facilitating agents or attorneys are available. There are a few IP service providing private agents in Kathmandu Who provide service to foreign applicants. There is no standard rate of fees for such service and it is not possible to calculate the cost including for the service of private IP agents. No significant numbers of domestic applications come through the IP agents. Generally entrepreneur himself or his employee directly comes to the department for the IP service.

4.5.3 Access to IP Service

Intellectual property administration, specially the administration of patent, industrial design and trademarks registration and renewal is done by the Industrial Property Section of Department of Industries (DOI) located at Kathmandu, the capital city of Nepal. The department has no

regional or district office outside Kathmandu City. There fore to get the IP service one must come to DOI in Kathmandu. Due to lack of good transportation and communication facilities in the country it is difficult to visit Kathmandu frequently in respect of copyright violation; a sufferer can make a complaint to the local police of their area. To increase the IP services to all entrepreneurs, inventors and creative people the IP service needs to be made available in all parts of the country with ease of access for all.

4.5.4 Quality of IP Services

Quality of the service provided by concerned authority is most important aspect for its growth and development. Efficiency, effectiveness and affordability are the major requisites of the IP service. Department of industries has stipulated the time for processing an application for patent design and trademarks as 1 month for patent, 15 days for design and 5 days for trademark. Time taken for the registration or for providing decision in the application in thus comparatively short compared to other countries. However, it is found that the time frames are not being adhered to. Due to lack of information and awareness of particular IP tools, applicants have to make various clarifications, make amendments and resubmit the documents during the formal check. In IP section of DOI, applications are examined with the help of annual journal of trademarks. At regards label/figurative marks there is no index and classification system and the examination is being done manually with the help of annual journal and the case file. For substantive examination the criteria fixed by the act is vague and there is no other explanation or standard for this purpose. In view of this the quality of examination and search is quite low. For the search and examination of the design application, there is no data base or system as per international practice.

Provision in the Act in this regard is also vague. It seems that there is no proper system of novelty search and a technician of technology section of the DOI carries out "industrial applicability" and "inventive step" examinations of a patent application. These technical staff does not possess proper knowledge and skill about patent examination. DOI is also responsible for the enforcement of Industrial property Rights. The department handles the cases of infringements and violation of IP rights in its semi judiciary authority. But the cases can not be decided expeditiously due to lack of sufficient and efficient manpower and literature for this purpose.

4.5.5 Level of Awareness

From the foregoing, one can say that the main cause for the low quality and quantity of the IP services in Nepal is lack of awareness on this subject among all segments of the society. The low level of awareness can be attributed to the following.

- A separate policy and program does not exist with the government for development of IP system.
- There is not a single institution for IP education and training in Nepal.
- Thought there are mire then 50 public funded R and D institution, 5 universities, and a large number of industries and establishments in private sectors, they have not filed a single patent so far.
- There are about 300 thousand enterprises (registered/unregistered) in Nepal, but only about 10 thousand trademarks are registered in the last 70 years.
- There is plethora of duplicate and pirated goods in Nepalese market but only a few cases have been refereed the concerned authority.

4.6 IP Education and Training

As mentioned earlier, there is an extreme lack of awareness on intellectual property rights and their importance for the overall development of the society. Also, officials of the government and its concerned sectors do not have adequate knowledge and skills required for the administration, enforcement, teaching, using and handling of IP tools. Nepal Law Campus of the Tribhuvan University has taken initiative to introduce intellectual property as a subject in its curriculum but it is not become effective. Under the affiliation of Purvanchal University Kathmandu School of Law has been teaching intellectual property as an elective course. WIPO provided training facilities abroad to IP officials, lawyers, and judges, police, and customs officials. But this trained manpower is not being utilized in the IP field. One or two national seminars on different aspects of IP are organization each year since last 10 years with cooperation of WIPO and a few.

CHAPTER V

COSTS AND BENEFITS OF TRIPS ARISING FORM AGRICULTURE

5.1Cost of TRIPS on agriculture

5.1.1. Compliance cost of TRIPS agreement

In order to comply with the agreement, there is a need to assume a wide range of obligations in almost all areas of intellectual property rights. In many areas, the pre- TRIPS laws of developing countries require very substantial changes, particularly in order to handle new issues, such as the protection copy right law of computer programs, databases and other areas.

There are also areas in which no previous legislation existed at all, such as in the case of undisclosed information, integrate circuits and plant varieties.

As mentioned, the TRIPS agreement includes enforcement rules and not just substantive provisions. Member countries do not only face the task of drafting and obtaining parliamentary approval of new legislation. Compliance with the agreement also calls for the revision of national laws in respect of civil, criminal and administrative procedures as well as redefining the role of the police and customs authorities. As illustrated by the UNCTAD study on TRIPS (1996), the cost of developing the institutional infrastructure to implement the TRIPS agreement standards may be substantial.

Amending or developing new legislation on TRIPS requires legal expertise in an a number of fields, which is often lacking in developing countries and LDCS.The drafting of legislation needs the active

involvement and cooperation of different state organization and also interaction with the private and society at large**.**

5.1.2 Cost of ignoring farmers and farming communities

Farmers and Farming communities are the owners of plant genetic resources a food and agriculture. Failure to provide them rights would adversely affect existence of Agro-biodiversity. No incentives should be allowed to discourage communities form their traditional roles and make them susceptible to exploitation by technologies. The ultimate effect will be loss of diversity and dependence on technologic which will hinder attainment of national goal for food security and property alleviation. Resource poor farmer cannot afford to use expensive technologies requiring high inputs for their Livelihood.[30]

Studies have indicated that farmers grow and are dependent on local plant genetic resources and traditional seed supply system. This contribution of farmers must be recognized, respected and rewarded. Ensuring farmers rights as visualized by the FAO commission can be better means in this regard.

Deviation from this commitment would lead to unsustainable agricultural production. Therefore, high diversity (HD) High productivity (HP) has to ensure for sustainable agriculture. Appropriate provisions for farmers' rights would pave the way towards attaining the goals of sustained growth to feed over growing population (Upadhaya: 2003)

5.1.3 Cost on products and agriculture

TRIPS may raise adverse impacts on agriculture for at least some times at the price of patented seeds fertilizer, pesticides etc will raise

[30] Modhusudan P. upadhyay (2002) protecting farmer Rights for sustainable Agriculture development in Nepal, farmers' rights to livelihood in the Hindu-Kush Himalayas, SAWTEE, Katmandu.

tremendously after the full execution of this agreement. Certainly if will raise the cost of the farm products which will ultimately raise price of farm products and will thus reduce export competitiveness in global market. It will also raise internal price level which will open the door for the MNCs. They will easily drive not indigenous Nepalese farmers from agriculture and other agro-based activities and will capture the whole domestic Market. In such circumstances, it is argue that globalization of agriculture may raise the level of imports than export.[31]

Due to the commercial use of agro biodiversity and its genetic resources MNCs can control faming system as a result poor indigenous farmer may displace from their traditional Knowledge skill practices of doing farming, which they have exercised from generation. Development of Biotechnology and advance R & D, Developed nations own exclusive right over seed and breeding process which could dippers. Stocking, reusing and exchanging seed which has been given slogan by UPOV. It is an organization of advance countries. If hampers all agro-based economy and discourages the poor farmer who has hardly provides land to month.

5.2 Benefits of TRIPS on Agriculture

5.2.1 Benefits from Implementation

Implementing the provisions of TRIPS could be a daunting task for Nepal as experiences elsewhere clearly show. Recognizing this, Nepal requested technical assistance for the implementation of TRIPS. Article 67 of TRIPS (Annex: 1) recognizes this need of the developing and least-developed countries. Nepal needs to take advantage of this provision and take support from developed members in the areas of formulation and enforcement of TRIPS related law and regulation.

[31] Dr. G.L Das (2004), Challenges and opportunities of Nepalese Agriculture Under WTO Regime. The Economic Journal of Nepal, Central Department Economics, Kirtipur, T.U. Vol. 27 July-Sept 2004.

If Governments in developing Nations justify the adoption of stronger intellectual property rights (IPRS), it can promote the following things, they are:

I. Domestic Innovation:

Expanded protection may however, affect public policies on science and Technology. this may be the case if public research institutes become more inclined to protect their research result and privative their use, for instance by transferring the title of such result to a private enterprises or by granting exclusive rights of exploitation.

Similarly, private firms and companies in Nepal make virtually no investment in research and development (R & D). Public sector research institutions and handicapped by resource crunch. Therefore, a stronger, IPR is least likely to stimulate investment in R & D with the expectation of inventing new technology, process or product.

ii. Benefit of Technology transfer:

It is not clear what the Impact of increased protection is likely to be on the transfer of technology. On the one hand, it may facilities access to technologies that the title holder may be reluctant to transfer in the absence of intellectual property protection. On the other land, with stronger protection, the risk of imitation will be lower and to the extent that title-holders can exploit their technology alone, they may be less inclined to part with it. As a result, it could become more difficult to obtain protected and if it is obtained, royalties and other prices and likely to be higher.

iii. Benefit of foreign direct investment

The financial resources of Nepal are at best limited, primarily due to poor economic performance of the country over the past few decades.

Secondly, the tax base of the country is very limited and tax evasion practice is rampant. Thirdly, Nepal has been hither to relying on official development assistance (ODA) to finance it development efforts. However, due to reduction in the size of ODA Nepal receives from the developed countries mainly owing to its reduction in absolute terms the shifting of the priorities of the donors. So, Nepal has followed a liberal foreign investment policy. Foreign Investment at any last is the priority of the present government. Therefore, Nepal is likely to be tempted to have strong IPR regime with the assumption that it would stimulate inflow of foreign direct investment (FDI).

iv. Benefit of building market and improving quality

Intellectual property rights not only promote R & D and product innovation; they also encourage the development of interregional and international distribution and Marketing networks that are important for achieving firm-level scale economies. Weak IPRS limit incentives for such investments because right owners can not prevent their marketing outlets from debasing the quality of their products, nor can readily deter counterfeiting of their trade marks. IPRS permit effective monitoring and enforcement of activities throughout the supply and distribution chains, giving both innovators and distributors an incentive to invest in marketing, services, and quality guarantees.

5.2.1.1 Complementary policies

As mentioned above, the benefits just listed are unlikely to emerge to a significant degree unless other market and policy conditions complement the intellectual property system. Thus, policy makers need to take a broad view of how to promote innovation, learning, and dynamic competition. The following collateral policy approaches are most important is securing such gains.

- **Human capital development:**

Perhaps the most important complementary factor is a strong commitment to education, training and skill development. The positive role of educational attainment in economic growth is well-established empirically. An economy with an abundance of skills will probably invest more in innovation and product development, but such investment is more likely where IPRS are protected.

- **Factor market flexibility**

Tightened intellectual property protection is likely to raise pressure for structural adjustment in many economies. Counterfeit production and piracy will be reduced significantly over time by trademark and copyright enforcement. The task of reallocating people currently engaged in such activity towards legitimate business will be easier. The more flexible is the labor market in term of internal migration and employment cost. It is also important to foster flexibility in the market for technical and managerial personnel which are important conduits for learning technologies and adapting them to new one.

- **Technology infrastructure**

While IPRS constitute an important stimulus for technology acquision and adaptation. They may be usefully supplemented by program to promote technical change. Industrial countries and many higher income developing countries have intensive system of support in this area. Such program range from public assistance for basic R & D in universities and research institute to extension services in agricultural science. They also provide in incentives for commercializing the results of public research and encouraging collaborative research ventures among private firms and between private and public enterprises for the

development of new technologies and products. Technology development processes could benefit in many countries from the use of incentive to bring publicly sponsored inventions to the market place.

R & D activity by local enterprise is an important conditioning factor for effectively absorbing technologies transferred from abroad.

- **Open market access:**

Openness improves a country's access to available international technologies, intermediate inputs and producer services, all items that can raise domestic productivity. The evidence demonstrates that such flows are deterred by weak patent rights and trade secrets (Maskus 2000 a) Moreover, a critical purpose of IPRS is to encourage investment in improved product quality which is essential for breaking into export markets. Similarly, IPRS can support marketing investments that raise product demand and permit economies of scale.

- **Competition policy**

Competition rules are used to discipline anti competitive practices in the use of IPRS. The essence of IPRS is to define the boundaries within which and inventor enjoys exclusive rights to use of his/her creation.

5.3 Benefits from agro-biodiversity and traditional knowledge

The benefits are very considerably in accordance with the level of economic and technological development of the country concerned. Strong legally protection R&D brings innovation. Nepal is weak in R&D. Expanded protection of IPRS affects public policies on science and technology. So that it will include protecting their research results and privatise their use and creating their exclusive rights of exploitation. Therefore a stronger IPR is leads likely to stimulate investment in R&D with the expectation of inventing new technology, process and product

moreover, it may facilitate access to technologies that the exclusive rights holder may be reluctant to transfer in the absence of the risk of imitation o frights holder. Consequently, it could become more difficult to obtain protected technology and if it is obtained, royalties and other prices are likely to higher.

In addition, TNCS have been emphasizing that higher standard of protestation of IPRS would lead to increased inflow of FDI in developing countries there is no conclusive evidence to suggest the same. Propaganda emanating form liberal economists holds that strong IPR protection is necessary to attract investment, particularly FDI.

Foreign investment at any cost is the priority of the present government. So, Nepal is likely to be tempted to have strong protection of IPR regime with the assumption that it would stimulate inflow of foreign direct investment.

In spite of the small country in the world, Nepal lies 31st position in the Biodiversity resources. According to the record, here is found 850 species of flowers 246 species of birds,700 species of flower 246 species of medicinal plants 5000 species of insects 185 species of fishers and others moreover, Nepal is a big stock of Agro biodiversity and genetic resources. As NARC (55) it has stocked 10,737 different kinds of grain-related genetic resources.

Owing to wide variation in its geography, Nepal is will endowed with plant varieties. TRIPS agreement of WTO encourages all member countries for the protection of plant varieties either by an effective suigeneris system or by patents or a combination of both patenting is costly as well as it need the capacity of expert for R$D for the creation of new product and seed. She has very week in biotechnology for creating hybrid through genetically modified organism (GMO). Being LDC,

Nepal has no alternative of suigeneris system. She can benefited from agriculture through ABS by contributing Agro-genetic resources, Traditional knowledge practices, skill and technology which we are inherited form generation to generation through prior informed consent (PIC) and mutually Agreed term (MAT). It will be advantageous to the farmers by protecting their germplasm if the nation establishes gene bank. It makes farmers available for bio-technical research by its national scientist.

High expertise is required in this regard to benefit the farmers. It should evolve sustainable methods of Agriculture that are less depended on imported inputs. Nepal can however, expect the benefit of foreign investment in Agriculture form the provision of the TRIPS if it guarantees national rules and regulation to protect IPRS. Nepal is already a member of the WIPO and it has been working to amend the national legislations relating to protection of the IPRS. Besides this, Nepal should promise a congenial atmosphere to attract foreign investment in potential to attract foreign investment in potential agricultural sector for export.

5.4 Benefit from international treaties

Regarding the protection of farmers' right and breeders rights, Nepal can benefit through international instrument such as CBD and ITPGRFA(see in annex:2) with the harmonization on the TRIPS Agreement. Nepal has already taken membership of CBD (See in annex:2). She can protect the rights of farmers and can take benefits through ABS which is explained later. On the other hand, Nepal is preparing to be a member of ITPGRFA treaty (see in annex:2). According

to the findings of the study, the potential benefits that Nepal can drive by acceding to the treaty of ITPGRFA.[32] These are:

1. Access to wider range of crops genetic resources of ex-situ gene bank held in international Agricultural Research centers (IARCS) and other institution of the world.
2. Access to the global crops diversity trust found for the conservation, characterization and sustainable use of national PGRFA.
3. Access to technology, assistance for capacity building and information sharing process form developed countries and UN FAO system.
4. Opportunity to raise national concerns in the PGRFA Governing Body and other International fora.
5. Sharing of benefit a rising on of the use of plant genetic resources and traditional knowledge of farming communities.
6. The ITPGRFA as an international platform to protect the interests of farmers'.
7. Supportive frameworks for national legislation on farmer's rights or related suigeneris legislation that has provision of farmers' rights.
8. Emergency help during disaster period.
9. Technical assistance for the implementation of the ITPGRFA

[32]. Devendra Gauchan and Madhusudan Upadhaya(2006),International Traty on Plant Genetic Resources For Food and Agriculture. Pro-Public Publication, Kathmandu.

5.5 Fair and Equitable sharing of Benefits

The south Asian region is endowed with very rich biodiversity. Two of the 12 mega-biodiversity centers of the world are situated here and it has more than 15,000 endemic species of plants' WTO. Diversity is intrinsically associated with the way of life of peoples, largely contributing to the evolution of a vast amount of rich traditional knowledge (TK) on the conservation and sustainable use of biodiversity. This region is relatively weak is technological capability, more so in the frontier areas of science, which could be applied for fuming the traditional knowledge and bio-resources wealth into economic strength and removal of rampant hunger and poverty.

Access and benefit sharing (ABS) is an important principle of equity recognized and legitimized in convention of Biological diversity (CBD)[33]. The provision of benefit sharing is seen as a trade off the technologically strong North and the biologically rich south to serve the mutual interest arising form biodiversity.

The CBD'S recognition of the sovereign right of states to regulate access to genetic resources is often eulogized as a major step. Forward in the recognition of inherent rights of countries of origin to participate in the benefits derived from the utilization of their genetic resources.[34] The CBD'S focus on the equitability of benefit sharing can be considered an attempt to address two main issues: In the first place, it aims to ensure that benefits derived from access to genetic resources translated into sustainable use and conservation as opposed to destructive exploitation of resources. Second, it aims to present the diversion of large monetary

[33] Pr.s. Bala Ravi et. al (2005), Access and Benefit Sharing Policy Concerns for South Asian countries. Brifing paper, Vol 12, SAWTEE, Katmandu.

[34] Columbia University (1999), Access to Genetic Resources: An Evaluation of Development and Implementation of Recent Regulation and Access Agreement.

profits to non local actors as this practice has prevented local users and legal owners from benefiting fully from their natural and genetic resources endowment.[35] Under Article 15(10) of CBD, a Country may benefit from genetic resources in three ways.

- By participating in research using the resources.
- By receiving a transfer of technology which uses the resource and,
- By sharing in the financial benefits realized from the commercial exploitation of the recourse.

The benefits can include obtaining scientific and technological knowledge, skill enhancement, up-front payment on collection of genetic resources, and royalties on product developed from the material, [36]

R.G Tarasotsky analyses the intersection between IPRS and the CBD in the following manner.

The first issue is whether IPRS enhance or hinder the channeling of 'equitable' benefit to the custodians of biological diversity (e.g., the south in general, indigenous and local communities in particular). This issue can be examined in relation to the rules on access to genetic resources and the protection of indigenous and local communities.

The second issue is also an equitable one, especially developing counties, to environmentally sound technology. Technology transfer has become an important component of the package of measures contained in modern multilateral environmental agreements: in the convention.

[35] Columbia University (1999), Access to Genetic Resources: An Evaluation of Development and Implementation of Recent Regulation and Access Agreement

[36] J. Mugabe et. al (1997), Managing Access to Genetic Resources, "in John Mugabe et. al (eds), Access to Genetic Resources strategies for sharing benefits.

Provision for this is made in Article 16. The question is the extent to which IPRS help or hinder such transfer.[37]

To strengthen the ability of traditional communities to derive benefits from the conservation of biological diversity and to assent their rights over genetic resources, knowledge and innovations, appropriate policies and legislation will be necessary. The countries providing genetic resources will have to improve the protection measures that are in place so as to prevent unlawful collection of genetic resource are to be shared fairly and equitably, states will need to be design specific mechanism to ensure that those benefits actually reach extended beneficiaries, be they local communities, natural research institutions or government conservation agencies.[38]

If the protection of genetic resources and associated indigenous knowledge is to be improved, the patenting of there resource in the name of communities must be considered. However, the cost of administering and enforcing a patent system are relatively high. In addition, in countries with poorly developed agriculture infrastructures and with low levels of social services, generally there is a large opportunity cost to such investments.[39]

[37] Richard G. Tarasofsky (1997), the relationship between the TRIPS Agreement and the convention on biological diversity: Towards a pragmatic approach, TRIPS and the Biodiversity convention.
[38] J. Mugabe et. al (1997), Managing Access to Genetic Resources, "in John Mugabe et. al (eds), Access to Genetic Resources strategies for sharing benefits.

[39] Brain Belcher and Geoffrey Hawtin (1991), A patent on lifer ownership of plant and Animal research, .

Non Exhaustive list of benefits to the communities

Monetary Benefits	Non-Monetary Benefits
⁾Collection of free	⁾Training to personnel for capacity building
⁾Research grant	⁾Technology transfer
⁾Income for sale of product	⁾Joint research
⁾Royalty from the new product	⁾Joint authorship on patent
⁾Income from the sale of plant and animal genetic resources	⁾Exchange of staff and researcher
	⁾Exchange of information

Source: Sherchand, Laxman. 2001 "Access to Agro-Biodiversity and Benefit Sharing in Nepal" paper presented at Judges' sensitization program on multilateral Environment Agreement organized by Judges Society Nepal and IUCN Nepal, 21-23 July, Biratnagar.

It is crucial to enact and enforce access and benefit sharing legislation. All the access to genetic resources agreements should be developed in accordance with such legislation. Further overall language of the agreements and access legislation should require the parties to adhere to Nepalese legislation dealing with conservation of biodiversity and the CBD. It must be kept in Mind that fair and equitable sharing of benefits will only occurs where indigenous and local people particularly those who invest in conserving and enhancing genetic resources have authority to negotiate for benefits by virtue of being legal owners of the resources. It is also worth mentioning that IPRS are exclusive rights and do not require the holder to share benefits material or otherwise, with the provider of genetic resources, regardless of the providers' contribution to

product development. IPRS are therefore not an appropriate mechanism to ensure benefit sharing unless IPR system is amended inline with the CBD.

CHAPTER VI

FARMER'S RIGHTS AND ITS IMPACT ON NEPALESE ECONOMY

6.1 Introduction

The very terminology farmers' rights emerged in debates at FAO where developing countries were questioning the legitimacy of plant breeders' rights in the industrialized countries. International undertaking on plant Genetic Resources (IUPGR) adopted by the FAO intergovernmental commission on plants Genetic Resources included the concept of farmers' Rights as an attempts to acknowledge the contributions farmers have made to the contribution and development of plant genetic resources, Which constitute the baric of plant production throughout the world. As defined by resolution 5/89 of the international undertaking on plant Genetic Resources, (IUPGR 1989), farmers rights are the rights " arising from the past, present and future contributions of farmers in conserving, improving and making available plant genetic resources particularly those in the canters of origin /diversity. Those right are vested in the international community, as trustees for present and future generations of farmers, and supporting the continuant of their contribution as well as the attainment of overall purpose of international undertaking"(Deb.2002)

Relevant section on farmers' right inserted in section 39 climes (IV) of plant variety perfections and farmers' right Act 2001 India, reads:

The farmer shall be deemed to be entitle to save, sow, re-sow exchange, share or sell his farm product including seed of a variety protected under this Act, in the some manner as he was entitled before the

coming into force of this Act, provided that farmer shall not be entitled to sell branded seed of a variety protected under this Act.

The farmers' rights advocates hold that the successful development of verities by breeders depends on genetic resources and related knowledge acquired by the farmers and the farming communities. Therefore, any inventions based on the knowledge and genetic resources of the farming community should be duly recognized and rewarded. Farmers' contribution to the process of variety screening and select ion could hardly be overlooked. In many instances, involvement of farmers in participatory breeding research leads to successful innovation of technology.

The purpose of the resolution 5/89 is to

a. Ensure that the need for conservation is globally recognized and that sufficient fund for there purpose will be available.

b. Assist farmers and farming communities, in all regions of the world, but especially in the areas of origin/ diversity of plant genetic resources in the protections and conservation of their plant genetic resources, and of the natural biosphere.

c. Allow farmers, their communities and countries in all regions to participate fully in the benefit derived, at present and in the future, from the improved used of plain genetic resources, through plant breeding and other scientific methods. In other worlds the farmer rights concept was intended to promote a more equitable relationship between the providers and users of germplasm by creating the basis for farmers to share in the benefits derived from germplasm they have developed and conserved over generation.[40]

[40] Lyle Gloeka et. Al (1994), A Guide to the convention on Biological Diversity.

While the objective and principles underlying the farmers' rights are complex, and not always easily interpretable, one of the major objectives of farmer's rights is to 'free' farmers from the dominant IPR regime.[41] Implementation of farmers' rights was principally to be through a voluntary international fund for plant Genetic resources farmers themselves would not benefit form the FAO- administered fund but rather government were to receive economic assistance in the maintenance of genetic resources.[42] However, the lock of contributions from Northern corporations' and their governments rendered this fund inoperative.[43] The nature of financing the international fund remains to be determined as well as how entitlements would be determined and benefits distributed. Farmers' rights are usually not the same kind of monopoly right as granted to professional breeders, but at least establish some recognition and compensation to rural communities for developing varieties. This is often linked to a funding mechanism instead of royalties.[44]

FAO IV international technical conference, hold in Leipzig in June 1996 provided a major forum for discussions by NGOS, indigenous and traditional peoples' organization on rights to and control over genetic resources. They prepared a peoples' plan of action on agriculture, food security and farmers, rights. The plan of action, inter alias, declares.

---

[41] Bees Butter and Robin pistorius (1996), "How framers' rights can be used to adapt plan Breeders' rights,"28 Bbiotechnology and Development monitor.

[42] Darrel A. Posey (1996), Traditional Resource Rights: International for protection and compensations for Indigenous peoples and local communities.

[43] G.S Nijar (1996), In Defense of local community knowledge and biodiversity: A conceptual framework and the Essential Elements of a Rights Regime.

[44] GRAIN (1998) "The International content of the suigeneris Rights Debate" in BIOTHAI/GRAIN (eds) signposts to sugeneris Rights.

- We commit ourselves of the implementation of farmer's rights in South and North as the fundamental prerequisite to the conservations of agricultural biodiversity.
- We commit ourselves to the rights of women farmers who have been true custodians and creators of agricultural diversity.
- We commit ourselves to the creation of alternatives to intellectual property systems that safeguard the rights of farming and indigenous communities and.
- We commit ourselves to ensuring the WTO review process in 1999/2000 removes agriculture from Uruguay round agreement and elimination of TRIPS.[45]

Leskion and flintier maintain that:

The farmers rights concept Possess demands on the international resource policy and it certainly requires that farmers in developing countries participate in the advantage and benefits devised from plant genetic resources furthermore, in line with CBD, farmers rights demand that national and international agricultural research full respond to the needs and demands of farming communities. The farmers' rights concept also calls for the full participation of farmers in the result of and the benefits resulting from the use of plant genetic resources and related knowledge.[46]

Some developing countries are trying to include 'progressive' provisions for farmers and indigenous communities in their otherwise predictable PVP acts. By progressive provisions we means: including

[45] cf. Darrell A posey (1996) above note 43.

[46] Dan Leskien and Michael Flitner (1997), Intellectual property Rights and plant Genetic Resources options for a suigeneris system.

farmers in the definition of breeders, making derogation for farmers tribal to apply PVP, setting up special funding mechanism for in-situ conservation of genetic resources, etc.[47] This has been the close in India, Bangladesh the Philippines and Thailand. These cast two countries also intend to include biosafty provisions in their PVP caws. Additionally, the Philippine draft requires that varieties be subject to country and covers both socio-economic concerns and parameters on genetic diversity.[48]

6.2 Reason for farmer's right

Farmers were free to share and exchange germplasm as a common heritage of humankind. Prior to the CBD, the free flow of genetic resources was accepted and in fact encouraged as a mechanism to ensure for food security and fight hunger and starvation at the global level. Asian and African countries did benefit from the services provided by the joint effort of farmers and scientific communities. Recently, in the quest to promote globalization and liberalization, issue like plant variety potation under the international union for the protection of new varieties of plants (UPOV) (see in annex: 2) and the trade related aspect of intellectual property rights (TRIPS) models have emerged. Such models have dirt implication on farmers' rights and conservation and sustainable utilization of genetic resources. Article 27.3(b) of TRIPS mentions "member may also exclude from patentability plants and animals other than micro-organisms and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However members shall provide for the refection of plants verities either through particle implies that members are obliged to provide protection to life forms including genetic resources.

[47] GRAIN (1998d)"Emerging National Responses," in BIOTHAI/GRAIN (eds), Signposts to sugeneris Rights
[48] GRAIN(1998)'The TRIPS Review takes off ' 15(4) SEEDLING

6.3 Suigeneris (Latin word) protection of farmers' varieties

The impetus for enshrining farmers' rights in national and international legal mechanism has signification increased in recent years as a result of the TRIPS accord. If was mandatory for the countries to adopt an effective suigeneris system in case they exclude patents. Most of the developing countries have accepted the suigeneris system for the protection of new plant varieties.

Suigeneris is an alternative unique from of IPP designed to fit a country's particular context and needs, which ensures distinctness, uniformity and stability in plant variety protection (PVP) process. Traditional knowledge and IPR are two main points for the dialogue and discussion while making a suigeneris system.

6.4 IPRS and Farmers' Right

Poor people live without fundamental freedoms of action and choice that the better –off take for granted. Within the IPR system of the WTO, this holds true in the case of developing countries' farmers (poor people),and the developing countries' breeders and commercial seed companies (better off)[49]

In developing countries, agriculture remains the main source of livelihood for between 50 percent and 90%of the population of this percentage, small farmers make up the majority i.e. 70 %to 95%.These farmers have been practicing traditionally farming method for millennia. These methods tremendously contribute in harnessing ecological genetic resource. Importantly, such traditional knowledge not only helps them sustain their life but development of genetic resources and farming system.

[49] Amatya Sen.1999, Development as Freedom New York:Knopt.

However in recent year, due to forces of globalization and the world trade organization (WTO), the livelihood patterns of there farmers, their traditional knowledge, and genetic resources are becoming subject to serious threats of Intellectual property Rights (TRIPS) Agreement of WTO has extending intellectual property Rights (IPRS) in agriculture rendering the developing countries farmers more vulnerable, marginalized and disadvantage. By irrationally strengthening the position of the breeders and commercial seed companies of developed countries in the world agricultural market, the provision of TRIPS Article 27.3(b)have severely restrained the rights of farmers in developing countries.[50] Which was the most contentious issue in agreement of WTO?

Patents and plant Varity protection (PVP) are two different forms of IPRS. Both provide exclusive monopoly rights over a creation for time. It is known that, a patent is rights granted to an inventor to prevent all other from making, using and /or selling the patented invention for 20 years. The criteria for a patent are novelty inventiveness (non-obviousness), and utility.[51] The provision for patenting on life form is the most contention issue within TRIPS.

PVP provides patents like rights to plant breeders. What gets protected in this case is the genetic makeup of a specific plants variety. The criteria for protection are: novelty distinctness uniformity and stability (DUSN). PVP lows can provide exemptions for use protected varieties, for further breeding and for farmers' allowing them to share seeds from their harvest. For the seed industry PVP is regarded as the

[50] Geoff. Tansey, 2002. *Food Security, Biotechnology and Intellectual Property.* Genera: Quaker United Nations Office

[51] Devlin Kuyek 2002. *Intellectual Property Rights in African Agriculture: Implications for Small Farmers.* Barcelona: GRAIN.

weaker sister of patenting mainly because of there exemptions.[52] yet often touted as a soft kind of patent regime, PVP lows are just as threatening as industrial patents on biodiversity, and also represent an at tack on the rights of farmers[53] (emphasis added)

There are four different but interrelated rights of farmers, which are mostly affected by these IPRS.

Right to seed

Most farmers in developing countries depend on informal seed supply system, i.e. they share, exchange, and reuse and sell seeds information in close connection with their neighbors and local people. Under the IPR regime, farmers will be denied the rights to save patented or protected seeds for subsequent planting and will have to buy seeds for each season. They loose control over plant varieties to corporations that control the seed market. Seed companies have already sued hundreds of Canadian and US farmers for using farm-saved patented seed. Farmers in developing countries will not be spared. Already, six big companies (Monsanto, Pupont , Syngenta , Pow, Aventis, and Group Pulsar) Own TU percent of the patents on major food crops, including rice, white, maize, Soya and sorghum.[54]

Rights to traditional knowledge

Respecting traditional knowledge does not mean keeping it form the world. It means using it in ways that benefit the communities' form

[52] Kuyek, Devlin, 2002. Intellectual Property Rights in African Agriculture: Implication for Small Farmers. Barcelona: GRAIN.

[53] www.grain.org

[54] See Rejeshori, Kannial and Alie Escalante de cruz. 2003. TRIPS, *Farmers' Rights and Food Security:* The Issues at Stake.

which it is drawn.[55] However, there seems no respect for traditional knowledge within the IPR system. While developing countries are home to about 90% of the world's genetic resources and traditional knowledge, more than90% of world's research and developing activities takes place in industrial countries. Where as a gene rich, technology poor south and a technology rich gene deficient North show the potential for mutually beneficial bargains a number of prominent companies of the North are using the traditional knowledge of farmers as well as plants or resources found in developing countries without remuneration.[56]

Right to Equity in Benefit Sharing Process

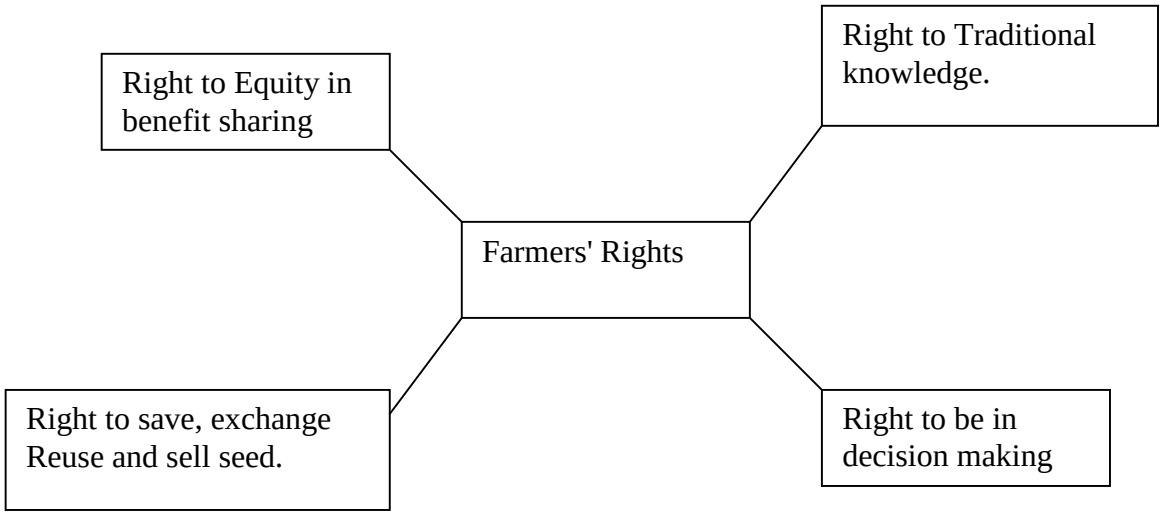
Throughout the world, farmers and their communities have developed vast portfolio of genetic diversity within crops and other plant species, which form the raw material for all agricultural activities, modern plant breeding, in fact builds on plant germplasm resources that have been traditionally developed and donated by farmers.[57] However, there are many cases revealing that a large number of patents have been granted on genetic resources and knowledge from developing countries without the consent of the possessors of resources and knowledge. There has been extensive documentation of IPR protection being sought over resources "as they are further improvement there include a US patent on quinoa, which was granted to researchers of the Colorado state university, a sacred and medicinal plant of the Amazon region and other patents on products based on plant materials and knowledge developed and used by

[55] UNDP. 2004. *Human Development Report.* New York: Oxford University Press.

[56] Hag ul Mahbnb. Human development Center 2002. *Human Development in South Asia: Agriculture and Rural Development,* Karachi: Oxford University press.

[57] www.fao.org

local and indigenous communities, such as those related to the neem, Kara, barbasco ended and turmeric.[58]



Right to participate in decision making process

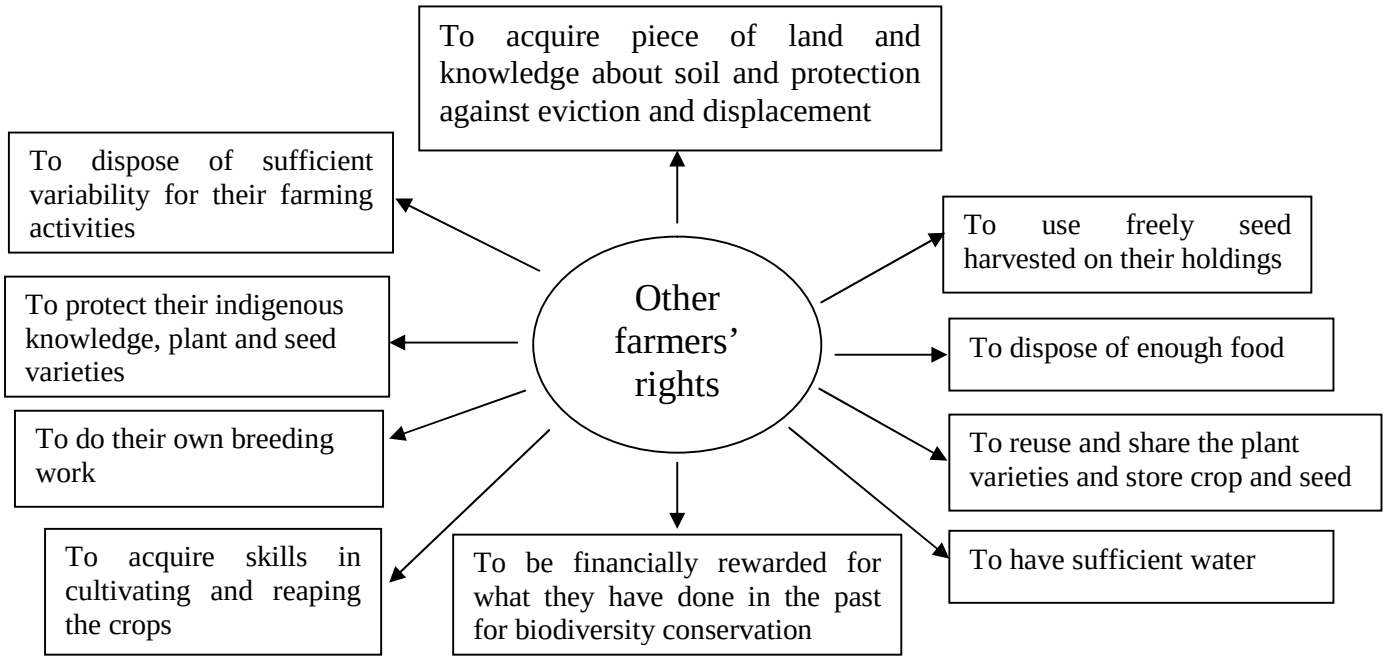
Farmers are unorganized group in the developing countries. They are, there fore, not consulted in the decision making process on matters related to their resources. It is often the organized group i.e., breeders and commercial seed companies, which decide their position whether that is in the market or during negotiations at the multilateral level. Such an exclusion from decision making process, which determines their, fate, obviously is a violation of their right.

There evidences reveal those farmers' rights are not a priority under IPR regime. If conservation and development are going to be mutually reinforcing, farmer's communities should not merely enjoy their right to receive economic benefit for the role they have played in the conservation and development of genetic resources.[59] Their rights to seed, traditional knowledge and take part in the decision making process should also be protected and promoted. Notably there are two important treaties–the

[58] Suman, Sahai 2003. "Indigenous Knowledge and its protection in India" in Christophe Bellmann et. al *Trading in Knowledge.* Genera: ICTSD.
[59] Adapted form www.mssrf.org

convention on Biodiversity (CBD) and international treaty on plant genetic resources (ITPGRFA). These seek to secure the rights of farers to plant genetic resources and recognizes there role in conserving biological diversity. Developing countries have observed their treaties as important guidelines to protect farmers' rights. They have been raising concerns at different from that the harmonization of TRIPS with them.

INCLUSION OF OTHER FARMERS' RIGHTS



6.5 Article 27.3 (b) and its threats to development countries

TRIPS and particularly Article 27.3 (b), which requires that member allow patenting of plants and animals that have been produced thro ugh "non biological" processes can have a significant affect on the livelihood and food security of Nepalese farmers.

6.51 Article 27.3 (b) and Plant variety protection

Article 27.3 (b) of TRIPS requires members to protect plant varieties, either through a suigenerie (of its own kind) regime such as

plant breeders' rights (PBR) or through patents or a combination of both. The article states that WTO members may exclude from patentability.

Plants and animals other than microorganisms are essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, member shall provide for the protection of plant varieties either by patents or by a effective suigeneris system or by any combination thereof.

The suigeneris provision in theory allows the members to develop their own system for protecting plants. In practice, however, the international Union for the Protection of New Varieties of Plants (UPOV) Convention has become the most widely used model for the implementation of countries' suigeneris obligations.

The UPOV Convention of 1961 has been revised in 1972, 1978 and 1991. All new members who join UPOV honored the rights of the farmers' to save, reuse and share seeds. The 1991 version, however, has restricted farmers' rights to do so and has given rights to the breeders to all production and reproduction of their varieties, including species as well as general plant varieties. "Through successive revision of the UPOV Convention, the protection offered to plant breeders has become more and more similar to patent rights to plants" (Adhikari et al. 2001)

TRIPS have initiated a global system of patent protection for microorganisms and microbiological processes. With regards to protect ting of a process used to produce a plant , provision for which is made in Article 27.3(b) of TRIPS, an owner of that patent is entitled to exclusive right over the plants produced using that process. Farmers may not be allowed to use any seed produced from a plant derived using a patented process. According to TRIPS, the burden of proof lies with the defendant

in that he/she has to prove that a product has been produced by a patented process.

While Article 27.3 (b) of TRIPS allows WTO members to exempt plants and animals from patenting, it requires the signatories to provide for protection of new plant varieties. A variety is considered distinct if it is distinguishable in one or more important characteristics form any other variety, uniform if it is "sufficiently uniform in its relevant characteristics with variation as limited as necessary to permit accurate description and assessment of distinctness and to ensure stability" and stable if "the relevant characteristics remain unchanged after repeated propagation". Plant variety protection (PVP) can only be accorded when a new variety fulfils these criteria. One of the possible problems encountered by the farmers is that if a farmer breeds new variety using a protected plant, the onus lies with the farmer to prove that the new variety he/ she has developed is significantly different form the original plant. If not, the new plant may be classified as "essentially derived" form the protected variety. Under the UPOV convention of 1991, the farmer's new variety cannot be grown or sold without the permission of license holder.

Even if a farmer can prove that he has developed a new plant variety, he/she might not be able to get a license on the patent due to the exorbitant costs associated with patenting. For example in the early 1990s the preparation of patent application in the United States (US) cost around US$ 20,000. A patent application in the European Union (EU) could cost up to US$ 40,000. As patents applications must apply for patents in every country where they want them, pay an annual fee to maintain the patent and pay for patent agents, the cost of filing patents become very high and beyond the reach of the farmers in the developing world.

The objective of Article 27.3 (b) of TRIPS is to protect the interest of the multinational companies and developing countries with well developed biotechnology capacities. This will probably lead to the corporation of food production as this agreement limits the farmers' capacity to develop, reuse and share seeds, which they have been doing since time immemorial. This could have dire consequences on food security of the farming in the developing world. Many developing countries have been saying that there should be no patent on life form as new not "inventions "but "discoveries".

6.5.2 Article 27.3(b) and food security

The use of patents on plant genetic resources in the developing world could jeopardize food security because large section of the population live below the poverty line and are engaged in agriculture. For these people anything that increases the cost of agriculture seed or other inputs could be damaging.

The restriction on farmers' rights to retain the seed on which the following year's harvest is dependent is also detrimental to the interests of poor farmers. As the Indian environmentalist Vandana Shiva write:" seed is the first link in the food chain a. It is the embodiment of life's continuity and renews ability of life's biological and cultural diversity. Seed for the farmer is not merely a source of future plants/ food: it is the storage place of culture, of history. Seed is the ultimate symbol of food security."

Traditionally, farmers save their seeds after each harvest and replant them in the following year. Many farmers in the developing world's trade and exchange seeds with other farmers. Such practices of on farm experimentation and conservation form the basis of food security and livelihoods for communities thought the developing world. Legal

mechanism such as Article 27.3 (b) of TRIPS could force farmers to purchase seed every year and ultimately displace them forms their farms.

6.5.3 Article 27.3 (b) and Biodiversity

The term biodiversity refers to "all living organisms their genetic makeup and the communities they form (Downes 2003)". Biodiversity is closely linked with Biotechnology. Form the time human beings started settlements and farming systems, communities have preserved biodiversity and benefited form the largesse of nature has its own way of preserving biodiversity by developing new species and discontinuing with the ones it deems redundant.

Human beings have challenged the intelligence of nature by developing biotechnologically modified new varieties of crops that give high yield. These seeds were used in the "Green Revolution" in countries like India and resulted in very high yields of rice and wheat. The large seed companies are the developers of these seeds. Farmers eagerly adopt these seeds due to high yields. This is illustrated b y the fact that by the end of the twentieth century, 75 percent India's rice production came from a mere 10 varieties, whereas India was once home to 30,000 varieties of rice (Downes 2003). This phenomenon has two negative impacts on food security. First, most of the hybrid seeds cannot be reused and the farmers have to buy seeds every year from big multinational companies. This will increase the cost of the farmers and make them vulnerable to the whims and fancy of a few large seed companies. The other negative impact on the food security comes due to mono cropping. If the crop is afflicted by disease then it could be devastating to the farmer. It has been historically proven that a narrowing gene base leads to higher risk and reliance one or few crops increases food insecurity.

6.5.4 Article 27.3 (b) and Farmers Rights

The twenty- fifth session of the FAO Conference on 1989 defined farmer's rights as "rights arising form the past, present, the future contributions of farmers in conserving, improving, and making available plant genetic resources, particularly those in the centers of origin/diversity. These rights are vested in the International community, as trustees for present and future generational of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions, as well as the attainment of the overall purpose the International Undertaking" (Downes 2003). This basically accepts the concept of farmers being allowed to save, use and exchange seeds.

The convention on Biological Diversity (CBD), 1992 is one of the most comprehensive environmental treaties concluded for the protection of global biodiversity. The CBD is based on the sovereign rights of the states to utilize their according to their own policies. The CBD is also recognizes the traditional knowledge of the farmers and has provisions for equitable sharing of benefits arising form the use of indigenous knowledge, innovation and practices. TRIPS, however, defines IPRs as private rights, which is in contrast to the provisional in CBD.

TRIPS thus violate the farmers' rights arising form the FAO understanding and provisions in the CBD. The restrictions on farmers' rights to save, use and exchange seeds and get benefits form their role in preserving biodiversity can have negative impact on the food security of the farmers.

6.5.5Article 27.3(b) and Biopiracy

TRIPS provide room for bio-piracy. Bio piracy involves claiming ownership of biodiversity products that emanate form the developing

world by multinationals companies of the developed world. The Indian environmentalist Vandana Shiva defines bio-piracy as "the use of intellectual property systems to legitimize the exclusive ownership and control over biological resources and biological products and processes that have been used over centuries in non-industrialized culture" (Downes 2003). Shiva also states that the patent claims over biodiversity and indigenous knowledge that are based on innovation, creativity and genius of people in the third world are acts of bio-piracy.

Some of the patents that have been granted could limit the access of farmers to essential seeds. For example, the patent taken out by Agraeetus refers to all genetic modifications of cotton regardless of germplasm in use. Patents have also been taken out on materials held in trust in gene banks in International Agriculture Research Centre. It is needless to say that this kind of bio-piracy and licensing will harm the interest of the farmers and increase food insecurity.

6.5.6Article 27.3(b) and Nepal

With Nepal's successful bid to join the WTO, TRIPS has become a reality. Paragraph 120 of the Report of the Working party on the Accession of the kingdom of Nepal to the world Trade Organization states that "The representative of Nepal said that the policy objective in the area of intellectual property was to provider effective and adequate protection to all categories of intellectual property in conformity with the provisions of Agreement on Trade Related Aspect of Intellectual property Rights." during the accession negations, Nepal has agreed to fully apply the TRIPS Agreement by 1 January 2007.

The concept of intellectual property is not entirely new to Nepal. Nepal's first patent, Design and Trademark and Act was promulgated as for back as 1937. The first copyright Act comes in 1965. While TRIPS

compliant copyright Act has entered into forced in 2002, its counterpart on the industrial property side is yet to be announced. A reincarnation of the industrial property legislation is now becoming an immediate reality. Relevant government agencies are already working on it.

In paragraph 130 of the Report of working party, Nepal has also committed to formulate a PVP Act by December 2005. Paragraph 130 also states that this Act will be intended to protect the rights of related stakeholders in accordance with the needs of the country and this would be a free- standing Act.

In paragraph 122 of the Report of working party, Nepal has committed that "it would also look at other WIPO and IP related conventions e.g., UPOV1991…. In terms of national interests and explore the possibilities of joining them in future, as appropriate."

For the time being, Nepal has succeeded to get away without signing UPOV 1991 and has the flexibility to develop its own PVP Act protecting farmers' rights.

As has been mentioned earlier, the farmers' rights to save reuse and exchange seed is at the heart of the agricultural system in Nepal. In addition, it has been the farmers who have saved the rich biodiversity through generations. As Nepal has not signed the UPOV 1991, the "plant variety and Farmers' Rights Bill" on which the government is presently working must ensure these farmers' rights. The bill should also ensure the farmers' rights to benefit sharing.

Bangladesh, India, Pakistan and sir Lanka have already formulated PVP Acts ensuring the special rights' of the farmers.

6.6 Models to protect farmers' Rights.

While many developing countries including china and South Korea have already enacted PVP laws in tune with UPOV, (It is explained in annex:2) many other including Bangladesh, Indonesia , Pakistan, Philippines and Sir lank are consulting UPOV to devise there PVP laws. Amidst pressures form the developed countries to join UPOV the developing countries, which are consulting UPOV, should take the stance by Nepal. Nepal manages to fend off the US pressure to join UPOV at the time of its accession negotiators at the WTO.[60] At the same time these countries should also take note of the fact that in response to UPOV and capitalizing on the TRIPS flexibility to adopt suigeneris legislation, India and Namibia has devised farmer's friendly PVP laws.

Which India has desired its law based on convention of farmers and Breeders (CoFaB), (in annex: 2) which is developed by Gene campaign Delhi based non-governmental organization, Namibia has based its low on the Africa model law for the protection of the right of local communities, which is developed by organization for African and unity (OAV) there two models could be of immense significance to other developing countries. However, not all countries have some nature of farming systems and plant varieties. Therefore, other developing countries can use there models as a reference so that they could prepare PVP laws that suit their socio-economic cultural and geographic needs.

6.7 Capitalizing on TRIPS Review process

One window of opportunity for developing countries is that article 27.3(b) is being reviewed. The review began in 1999 and is still

[60] See for Details Ratnakar Adhikari and Kamablesh Adhikari. 2003. Upor: Faulty Agreement and coercive practices. A policy Brief, Kathmandu: SAWTEE.

underway at the TRIPS council. The Doha ministerial of the WTO held in November 2001, having focused on the problems posed by Article 27.3(b) has clearly directed the TRIPS council to examine among other, relationship between TRIPS and the CBD and the protection of traditional knowledge and folklore. In its review the council is to be guided by "The objectives and principles set our in Articles 7$8 of the TRIPS Agreement" and "to take fully into account the development dimension"[61]

Therefore for developing countries the TRIPS review forces are an important avenue to call on the WTO to reconsider the controversial provisions of patents and PVP. Already, many developing countries have made numerous proposals to amend TRIPS to prohibit patents on life limit bio-piracy by identifying the origin of genetic materials and traditional knowledge in patent applications or guarantee space within TRIPS for farmers' and indigenous peoples rights. The industrialized countries do not want to 'weaken' the protection of companies get under the current text and are not willing to discuses many of there ideas.

6.8 Priorities for farmers' rights in India

In India, nearly 60 percent of the total population is involved in agriculture, which constitutes 25 percent of gross domestic product. The country is also a rich repository of natural resources, including agro and forest biodiversity.

Various parts of the country like the Western-Ghats and the North Eastern Hilly area have a number of wild varieties of crops and plants as well as animal species. It is mostly the rural farming community, which has been using, nurturing and preserving these varieties. The vast amount of traditional knowledge, skills and technologies (TKST) possessed by the community has played a significant role in developing these varieties.

[61] Rajeswari, Kanniah and Alice Escalante de cruz. 2003 above not 55.

However, such TKST are shared only within the community. Not all the bio-logical resources and TKST associated with them have been documented. Due to these, on one hand, there is a threat of the loss of biodiversity and extinction of TKST, on the other no legal action can be taken in the case of piracy of such resources and TKST.

Piracy of biological resources and associated TKST is already a major concern in India. The outsides (companies) from other countries have an increasing tendency to hold patent rights on the country's resources and also use the TKST possessed by the community. It is unfair that the outsiders use them commercially without, sharing the benefits and that too without prior informed consent (PIC) of the community. Such a tendency has also excluded farmers from the decision making process.

India is a contraction state of convention on biological diversity (CBD) and has ratified international Treaty on Plan Genetic Resources for Food and Agriculture (ITPGRFA). The country is also a member of the world Trade organization (WTO), which obliges members to comply with the provisions of Trade Related Aspect of Intellectual Property Right (TRIPS). These international instruments do largely concern with the above mentioned issues relating to farmers' rights. Under each of these instruments, national governments are responsible for implementing the policy and legal measures at the domestic level. Under CBD, India enacted Biodiversity Act (BDA) in 2002. Similarly, as required by TRIPS, the country enacted Protection of Plant Variety and Farmers' Right (PPVFR) Act in 2001 (See the box).

Status of PVP Law

India introduced PPVFR Act, 2001 as part of its TRIPS commitment to devise a *sui generis* PVP law. It may be for the first time in the legislative history of India that farmers' rights have been recognized the law itself. Balancing the rights of breeders and the rights of farmers, the Act deals with three aspects of farmers' rights:

- Farmers' rights to save, exchange and sell (except branded) seeds;
- Benefit sharing based on compensation and operating through a mechanism where communities/farmers can make claims for compensation; and
- Farmers must be able to register their varieties in the similar fashion as breeders.

The National Gene Fund is to cater to the benefit sharing expenditure or to support the conservation and sustainable use of genetic resources. However, the Act is not clear about how the fund is going to be used. Another distinct feature is that the authorization to sell and market n essentially derived variety from farmers' variety should not be given to the breeders without PIC from the farmers.

After the enactment of this Act, in 2002, the government of India decided to join Union for the Protection of New Varieties of Plants (UPOV) 1978. Accession to UPOV demands that India should have a pro-breeader and pro-patent plant varieties protection scheme. Non-governmental organizations (NGOs) from various corner of the country are opposing this move. Gene Campaign, Delhi-based NGO, has filed public interest litigation at the Delhi High Court to ensure that this decision does not dilute the provisions of the PPVFR Act.

CBD ensures equitable benefit sharing for the commercial use of natural resources and protects the interest of farming communities, including indigenous communities like vaids, hakims etc. Ensuring farmers' participation in the decision making process, the act provisions for the Biodiversity Management Committee at the Panchayat level, with

representation from farming/tribal communities. The Committee is responsible for monitoring the biodiversity of the territory. PPVFRA recognizes farmers as conservators, breeders and cultivators, and has provisioned for the constitution of a Gene Fund, Which would facilitate the access and benefit sharing (ABS) mechanism.

However, there is no comprehensive policy in India on PIC and ABS. But at present, there are some important policies like agriculture Policy, Seed Policy and Environment Policy that deal with biodiversity conservation and PIC and ABS.

It is, therefore, important for all the stakeholders, including the government, to discuss the strengths and weaknesses of these policies and laws. Whether or not existing policy and legal frameworks are sufficient to protect farmers' rights relating to ABS and PIC should be at the centre of debate? If they are not sufficient, the government should take initiatives for amending them.

6.9 Options to protect farmer's rights in Nepal

Nepal's economy is agriculture based. About 83 present of its total household is engaged in agriculture and the sector contributes 39 percent to the national gross domestic product. Also, the country is rich in biodiversity and has a vast reservoir of agro-genetic resources. Farmers' contribution in the conservation, improvement and management of such resources is tremendous.

Convention on Biological Diversity (CBD) has stipulated that the contribution of farmers in conserving, improving and making available these genetic resources be the basis for their right. Although it took some time for Nepal, concerns have been shown in recent time at the national level those farmers' rights relating to genetic resources and traditional

knowledge should be protected. Consequently, the issues of prier informed consent (PIC) and access and benefit sharing (ABS) have gained wider recognition, which is also evident from the government's efforts to prepare the policy and law on ABS and related laws, e.g., Draft Bill on Access to Genetic Resources and Benefit Sharing, 2002, Draft Policy on Access to Genetic Resources and Benefit Sharing, 2002, and Draft Bill on Plant Variety Protection and Farmers' Rights, 2004. But unfortunately, all of these polices and laws are still in the draft form and none of them have strongly provisioned for the farmers' participation in the decision making process.

These policies and laws have been prepared in compliance with different international conventions and treaties that deal with the issues of biodiversity, genetic resources and farmers' rights. CBD is one of them. The convention has clearly stated that access to genetic resources should be subject to PIC of the contracting party providing such resources and it also mandates the states to have a national legislation as per which the benefits arising out of the of utilization of those resources should take place. Nepal signed and ratified this convention in 1992 and almost after 10 years, in 2002, prepared Draft Bill on Access to Genetic Resources and Benefit Sharing and Draft Policy on Access to Genetic Resources and Benefit Sharing in order to fulfill its obligations under Articles 15(7) and 16 (3) of the convention. These drafts include the modalities of ABS (both in monetary and non-monetary terms) and PIC, which might have been prepared by following the Bonn Guidelines. But the non-representation of farmers at any civil society groups in the "National Genetic Resources Conservation Authority" that it has envisaged to form is the most obvious lacuna in these drafts.

Similarly, to comply with TRIPS, Nepal has prepared the Draft Bill on Plant Variety Protection and Farmers' Rights as the suigeneris system. This draft has tried to strike a balance between the rights of farmers and the breeders of plant varieties but lack the provision of farmers' participation in the decision making process. Besides, in some provisions of farmers' rights, the bill is not varying clear and there are rooms to argue that they would operate in against of farmers' interest in the future (See the box).

Status of PVP Law

Following its membership in the World Trade Organization (WTO), Nepal prepared the Draft Plant Variety and Farmers' Rights Bill in 2004 to comply with TRIPS. The bill has recognized the past, present and future contributions of farmers and has given them the right to save, exchange, reuse and sell their seed. The bill has also given the right to farmers to use protected new varieties without any claim form the breeders, if such varieties are used merely for subsistence.

Apart from these, the bill has also made a provision of compensation to farmers in case they do not get the harvest as declared or are not provided all required information well in advance.

Despite these pro-farmer provisions, the bill is not without flaws. Regarding access to genetic resources owned by farmers, the bill has only mentioned about taking 'prior consent' of farmers, not the 'prior informed consent'. The exclusion of the word 'informed' may result in a mere formality of taking consent of farmers without informing them about the pros and cons of such access. The issue of PIC has also not been addressed in the case of the use of traditional knowledge of the farming communities.

Similarly, while conferring the rights to farmers on ABS, the bill has mentioned only about the common and traditional knowledge of farmers, whereas it should have been common and traditional knowledge, skills and practices. The biggest flaw in the bill is that the bill has not mentioned any where in the test the right of farmers to participate in the decision making process. The inclusion of farmers in the decision making process is important and the government must ensure it while enacting the law.

The objectives of International treaty on Plant Genetic Resources for Food and Agriculture (ITPGRAFA) are the conservation and sustainable use of PGRFA and the fair and equitable sharing of benefits derived from their use, in harmony with CBD, for sustainable agriculture and food security. Nepal has not yet signed the treaty but reportedly, the country is ready to ratify the treaty.

Indeed, Nepal has many options to protect farmers' rights in relation to PIC an ABS. The challenge lies in managing these international instruments and implementing them through domestic policies and laws.

CHAPTER VIII

SUMMARY, FINDINGS AND RECOMMENDATIONS

7.1 Summary

Trade related aspects of intellectual property rights are now regarded as the vehicle for innovation, technological transfer which ultimately supports in economic development of a country. The millennium development goals (MPGS) are big major concerns for every country. Nepal is agro-based economy. Majority of its population depend upon Agriculture development of Agriculture is synonymous with the development of country. Now, TRIPS varieties. TRIPS have brought the term of Bio-piracy that is vulnerable to the protection of for stocked plant genetic resources. Biodiversity and its genetic resources farmers have its own traditional knowledge, skills practices and technology of doing their farming system. TRIPs is also raises the question of the protection of farmers' and Breeders' right which is the direct effect on food security on the population. Nepal has taken poverty reduction as her prime development policy. The tenth plan is its main policy document which seems lacking in integrating intellectual policy with development policy.

The provisions made in this regard are found inadequate. Nepal entered in WTO a comprehensive, binding multilateral Trading regime as 147th member and recognize as the first member from least developed countries (LDCS). TRIPS were a important and contentious issue in the final Uruguay Pound agreement before inclusion in the WTO.

We have answered many questions set by WTO in acceding process; however the policies are not property formulated to get benefits from the membership even until now. So is in TPR field. In this context, some questions were put in this study.

- What are the legal provision of TRIPS and made the commitments by Nepal in the harmonization with TRTPS agreement.
- What is the existing status of IPRS and which development sector can be more facilitated through the strong protection of intellectual property rights in order to reduce poverty in Nepal?
- What are costs and benefits of TRIPS arising form Agriculture of developing country like Nepal?
- What are the farmers' rights that the TRIPS agreement made conscious to the developing Agro-based economy?

To seek the solution of the above mentioned problems of this study the following objectives were set.

- To study the provision of TRIPS agreement on WTO.
- To study the status and identify key development sector of TRIPS which can more facilitated through strong protection of intellectual property Rights.
- To study the possible costs and benefits of TRIPS arising from Agriculture in Nepalese economy.
- To study of farmers' rights and its impact on agro-based economy.

The study carried on a descriptive way. The acts were reviewed and some administrative set up and agriculture perspective of TRIPS were studied.

The secondary data obtained from DOI, NGOs, INGOs and respective government organization was analyzed during this study. By reviewing the literature, analyzing the secondary data and interaction with concerned policy makers leads to conclude the above study topics.

7.2 Findings

Communication of intellectual property rights (IPRs) are regarded as a powerful tool for economic development. The history of developed country showed the positive relation with IPR protection and development. But we don't have such data which proved the above relation, Nepal has entered in multilateral trading regime by accession the WTO membership which is not only opportunity for the nation's development but may threat to exploit resources. The world trade is very competitive: to take advantages from such competition the policy should be strengthen. There needs policy integration to meet the development challenges. Trade Related Aspects of intellectual property Rights (TRIPS) was the most important area under WTO agreement. TRIPS, one of the visible sectors to development through technology transfer and other means of innovation have the given more priority in the context of WTO.

Despite the importance of agricultural in the national economy and predominance of informal seed supply system in the farmer's livelihood plant genetic resource conservation for food and agriculture has not get been recognized as an important part of the biodiversity conservation in Nepal. Present programmes on biodiversity are more focused of forestry resource including wildlife than overall genetic diversity, encompassing food and agricultural crops.

Nepal presently lacks overall policy for the sustainable utilization and conservation of PGRFA in Nepal. There is a patent law used for industrial products and several other laws, including a seed Act (1988), seed regulation (1997) and Seed policy (2000) that bear on PGRFA.

It is known that a majority of people not only in Nepal but also in south Asia depend on agriculture and related activities for their livelihood. More importantly, there is no other region in the world where

biodiversity has such a close linkage with people's livelihood. Biodiversity is intrinsically liked with people lives, also contributing to the evaluation of a vast amount of rich TK, However, the region lack technological capability, which can turn the bio-resource and related TK wealth into economic strength and contribute to the poverty reduction.

Patents and PVP have a great potential to affect farmers' right to seed, traditional knowledge, benefit sharing and participate in the decision making process. Developing countries like Nepal regard the suigenesis (of its own kind) system as an effective legal basis to protect farmers' rights. Unfortunately, many developing countries have already enacted their PVP laws in tune with UPOV and many are consulting it in the process of preparing their laws. India and Namibia have taken a different more. While India has enacted its PVP law based on CoFaB. Besides there models, there are two international instruments that explicitly underscore the need to protect farmers' rights – the CBD and ITPGRFA.

Nepal had to comply its legal set upto 1 January, 2001 in full fledged. According to Hong Kong ministerial conference 2005, the transition period of compliance has extended to 2013 AD for LDCS. In spite of this, Nepal should make strong legal provision with the coordination of different sectoral ministries. Existing draft legislation such as Access and Benefit sharing and other policy related to PGRFA needs to reviewed, adapted and harmonized according with national needs and requirement of WTO, TRIPS, CBD and the international treaty on PGRFA. Sooner we do it sooner we get benefits. Costs of TRIPS challenges on our effort and capacity.

7.3 Recommendations

The government of Nepal has to formulate appropriate policies regarding intellectual property rights in conformity to TRIPs and the threats that have been raised form it in the agriculture and farming communities should be protected.

For a country like Nepal, which is relying on its neighbor, and other countries for its technological development and which has a proportionately higher biodiversity reserve, the impact is bound to be severe. If the corrective measures are not taken in time, there is a threat for the entire country. Therefore, the following recommendations are worth taking not of:

On TRIPS agreement

- Anti-competitive practices that are allowed by TRIPS agreement should be prevented.
- Suigneris law should be allowed to be used for the plant variety protection in indigenous and local farm communities, consistent with the convention on biological diversity and the FAO international Undertaking on plant Genetic Resources.
- A team of experts and a multilateral fund should be created to provide technical and financial assistance for developing and least developed countries to set up fully equipped patent offices.
- Identify and document all biodiversity products in the country.
- States have the sovereign rights over their own natural resources including their genetic resources.
- Farmers' rights arising from past, present and future contributions of farmers in conserving, improving and making available plant genetic

resources are reignited in order to allow farmers, their communities, in countries in all regions of the world to participate fully in the benefits derived at present and in future, through plant breeding or other scientific methods.

On the Farmers and Agriculture

- It is crucial for Nepal to develop mechanism for recognizing that vast knowledge and rewarding the owners of such knowledge. Unless appropriate policy legal mechanism are developed and implemented, the communities holding such knowledge will be further marginalized. The government and NGO community should promote preparation of community Biodiversity registers and community seed registers. The government should extend legal recognition to such registers.
- Nepal also needs to seriously think about enacting a comprehensive biodiversity, legislation which should include conservation of biodiversity, sustainable use of components of biodiversity and fair and equitable sharing of benefits arising from the use of genetic resources. It should also include provisions. Relating to farmers' rights, if a separate legislation for protection of farmers' rights is relegated to law priority by the government. If would be most wise to include a few substantive provisions relating to conservation of biodiversity and farmers' rights in the constitution of Nepal.
- The future development of potential PGRFA policy should be guided by the realistic research and consultation process. Active participation of important stakeholders from both public and private – I/NGO sector including the farming communities the custodian of genetic resource is essential.

- Nepal should give utmost priority to the protection of farmers' rights and protecting its agriculture from the adverse effect of modern biotechnology which is likely to further marginalize farmers and contribute to genetic uniformity.
- Access to genetic resources shall be subject to prior informed consent (PIC) where granted; access shall be on mutually agreed terms.
- Benefits arising from the commercial and other utilization of genetic resources shall be shared in a fair and equitable way upon mutually agreed terms, multilaterally or on a bilateral basis.
- Capitalize on the TRIPS review process as an avenue to ensure farmers' rights.

On international treaties

- Resist the pressure of developed countries to join UPOV.
- Analyze how the CBD and ITPGRFA can provide necessary guidelines in the process of preparing PVP laws of national level.

ANNEX – 1

LEGAL TEXT OF AGREEMENT ON TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS).

PART I GENERAL PROVISIONS AND BASIC PRINCIPLES

PART II STANDARDS CONCERNING THE AVAILABILITY, SCOPE AND USE OF INTELLECTUAL PROPERTY RIGHTS

1. Copyright and Related Rights
2. Trademarks
3. Geographical Indications
4. Industrial Designs
5. Patents
6. Layout-Designs (Topographies) of Integrated Circuits
7. Protection of Undisclosed Information
8. Control of Anti-Competitive Practices in Contractual Licenses.

PART III ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

1. General Obligations
2. Civil and Administrative Procedures and Remedies
3. Provisional Measures
4. Special Requirements Related to Border Measures
5. Criminal Procedures

AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

Members,

Desiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade;

Recognizing, to this end, the need for new rules and disciplines concerning

a) The applicability of the basic principles of GATT 1994 and of relevant international intellectual property agreements or conventions;

b) The provision of adequate standards and principles concerning the availability, scope and use of trade-related intellectual property rights;

c) The provision of effective and appropriate means for the enforcement of trade-related intellectual legal systems;

d) The provision of effectives and expeditious procedures for the multilateral prevention and settlement of disputes between governments; and

e) Transitional arrangement aiming at the fullest participation in the results of the negotiations;

Recognizing the need for a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods;

Recognizing the need for a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods;

Recognizing that intellectual property rights are private rights;

Recognizing the underlying public policy objectives of national systems for the protection of intellectual property, including development and technological objectives;

Recognizing also the special needs of the last-developed country Members in respect of maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base;

Emphasizing the importance of reducing tensions by reaching strengthened commitments to resolve disputes on trade-related intellectual property issues through multilateral procedures;

Desiring to establish a mutually supportive relationship between the WTO and world Intellectual property organization (referred to in this agreement as "WIPO") as well as other relevant international al organizations;

Hereby agree as follows:

PART I GENERAL PROVISIONS AND BASIC PRINCIPLES

Article 1 Nature and Scope of Obligations

1. Members shall give effect to the provisions of this agreement. Members may, but shall not be obliged to, implement in their law more extensive protection than is require by this agreement, provided that such protection does not contravene the provisions of this agreement. Members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice.

2. For the purposes of this agreement, the term "intellectual property" refers to all categories of intellectual property that are the subject of sections 1 through 7 of Part II.

3. Members shall accord the treatment provided for in this agreement to the nationals of other Members.[62] In respect of the relevant intellectual property right, the nationals of other Members shall be understood as those natural or legal persons that would meet the criteria for eligibility for provide for in the Paris Convention (1967), the Berne Convention (1971), the Rome convention and the Treaty on Intellectual Property in Respect of Integrate Circuits, were all Members of the WTO Members of those conventions.[63] Any Member availing itself of the possibilities provided in

[62] When "nationals" are referred to in this agreement, they shall be deemed, in the case of a separate customs territory member of the WTO, to mean persons, natural or legal, who are domiciled or who have a real and effective industrial or commercial establishment in that customs territory.

[63] In this Agreement, "Paris Convention" refers to the Paris Convention for the Protection of Industrial Property; "Paris Convention (1967) refers to the Stockholm Act of this Convention of 14 July 1967. "Berne Convention" refers to the Berne Convention for the Protection of Literary and Artistic Works; "Berne Convention (1971)" refers to the Paris Act of this Convention of 24 July 1971. "Rome Convention" refers to the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, adopted at Rome on 26 October 1961. "Treaty on Intellectual Property in Respect of Integrated Circuits" (IPIC Treaty) refers to the Treaty on Intellectual Property in Respect of Integrated Circuits, adopted at Washington on 26 may 1989. "WTO Agreement" refers to the Agreement Establishing the WTO.

paragraph 3 of Article 5 or paragraph 2 of Article 6 of the Rome Convention shall make a notification as foreseen in those provisions to the Council for Trade-Related Aspects of Intellectual Property Rights (the “Council for TRIPS').

Article 2 Intellectual Property Conventions

1. In respect of Parts II, III and IV of this Agreement, Members shall comply with Articles 1 through 12, and Article 19, of the Paris Convention (1967).
2. Nothing in Parts I to IV of this Agreement shall derogate from existing obligations that Members may have to each other under the Paris Convention, the Berne Convention, the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits.

Article 3 National Treatment

1. Each Member shall accord to the nationals of other Members treatment no less favorable than that it accords to its own nationals with regard to the protection[64] of intellectual property, subject to the exceptions already provided in, respectively, the Paris Convention (1967), the Berne Convention (1971), the Rome Convention or the Treaty on Intellectual Property in Respect of Integrated Circuits. In respect of performers, produces of phonograms and broadcasting organizations, this obligation only applies in respect of the rights provided under this Agreement. Any

[64] For the purposes of Articles 3 and 4 "protection" shall include matters affecting the availability, acquisition, scope, maintenance and enforcement of intellectual property rights as well as those matters affecting the use of intellectual property rights specifically addressed in this Agreement.

member availing it of the possibilities provided in Article 6 of the Berne Convention (1971) or paragraph 1 (b) of Article 16 of the Rome Convention shall make a notification as foreseen in those provisions to the Council for TRIPS.

2. Members may avail themselves of the exceptions permitted under paragraph 1 in relation to judicial and administrative procedures, including the designation of an address for service or the appointment of an agent within the jurisdiction of a Member, only where such exceptions are necessary to secure compliance with laws and regulations which are not inconsistent with the provision of this agreement and where such practices are not applied in a manner which would constitute a disguised restriction on trade.

Article 4 Most-favored-Nation Treatment

With regard to the protection of intellectual property, any advantage, favor, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members. Exempted from this obligation is any advantage, favor privilege or immunity accorded by a Member:

a) driving from international agreements on judicial assistance or law enforcement of a general nature and not particularly confined to the protection of intellectual property;

b) granted in accordance with the provisions of the Berne Convention (1971) or the function not of national treatment but of the treatment accorded in another country;

c) in respect of the rights of performers, producers of phonograms and broadcasting organizations not provided under this agreement;

d) deriving from international agreements related to the protection of intellectual property which entered into force prior to the entry into force of the WTO agreement, provided that such agreements are notified to the Council for TRIPS and do not constitute an arbitrary or unjustifiable discrimination against of other Members.

Article 5 Multilateral Agreements on Acquisition or Maintenance of Protection

The Obligations under Article 3 and 4 do not apply to procedures provided in multilateral agreements concluded under the auspices of WIPO relating to the acquisition or maintenance of intellectual property rights.

Article 6 Exhaustion

For the purposes of dispute settlement under this agreement, subject to the provisions of Articles 3 and 4 nothing in this agreement shall be used to address the issue of the exhaustion of intellectual property rights.

Article 7 Objectives

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Article 8 Principles

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.
2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices with unreasonably restrain trade or adversely affect the international transfer of technology.

PART II STANDARDS CONCERNING THE AVAILABILITY, SCOPE AND USE OF INTELLECTUAL PROPERTY RIGHTS

SECTION 1: COPYRIGHT AND RELATED RIGHTS

Article 9 Relation to the Berne Convention

1. Members shall comply with Articles 1 through 21 of the Berne convention (1971) and the Appendix there to. However, members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6bis of that Convention or of the rights derived there from.
2. Copyright protection shall extend to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such.

Article 10 computer Programs and Compilations of Data

1. Computer programs, whether in source or objects code, shall be protected as literary work under the Berne Convention (1971).
2. Compilations of data or other material, whether in machine re ad able or other from, which by reason of the selection or arrangement or their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself.

Article 11 Rental Rights

In respect of at last computer programs and cinematographic works, a Member shall provide authors and their successors in title the right to authorize or to prohibit the commercial rental to the public of originals or copies of their copyright works. A Member shall be excepted from this obligation in respect of cinematographic works unless such rental has led to widespread copying of such works which is materially impairing exclusive right of reproduction conferred in that Member on authors and their successors I n title. In respect of computer programs, this obligation does not apply to rentals where the program itself is not the essential object of the rental.

Article 12 Terms of Protection

Whenever the term of protection of a work, other than a photographic work or a work of applied art, is calculated on a basis other than the life of a natural person, such term shall be no less than 50 years from the end of the calendar year of authorized publication, or, failing such authorized

publication within 50 years from the marking of the work, 50 years from the end of the calendar year of making,

Article 13 Limitations and Exceptions

Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.

Article 14 Protection of Performers, producers of Phonograms (Sound recordings) and Broadcasting Organizations

1. In respect of a fixation of their performance on a phonogram, performers shall have the possibility of preventing the following acts when undertaken without their authorization: the fixation of their unfixed performance and the reproduction of such fixation. Performance shall also have the possibility of preventing the following acts when undertaken without their authorization: the broadcasting by wireless means and the communication to the public of their live performance.
2. Producers of phonograms shall enjoy the right to authorize or prohibit the direct or indirect reproduction of their phonograms.
3. Broadcasting organizations shall have the right to prohibit the following acts when undertaken without their authorization: the fixation, the reproduction of fixations that the rebroadcast by wireless means of broadcasts, as well as the communication to the public of television broad casts of the same. Where Members do not grant such rights to broadcasting organizations, they shall

provide owners of copyright in the subject matter of broadcasts with the possibility of preventing the above acts, subject to the provisions of the Berne Convention (1971).

4. The provisions of Article 11 respect of computer programs shall apply mutatis mutandis to producers of phonograms and any other right holders in phonograms as determined in a Member's law. If on 15 April 1994 a Member has in force a system of equitable remuneration of right holders in respect of the rental of phonograms, I t may maintain such system provided that the commercial rental of phonograms is not giving rise to the material impairment of the exclusive rights of reproduction of right holders.

5. The term of the protection available under this Agreement to performers and producers of phonograms shall last at least until the end of a period of 50 years computed from the end of the calendar year in which the fixation was made or the performance took place. The term of protection granted pursuant to paragraph 3 shall last for at least 20 years from the end of the calendar year in which the broadcast took place.

6. Any Member may, in relation to the rights conferred under paragraphs 1, 2 and 3, provide for conditions, limitations, exceptions and reservations to the extent permitted by the Rome convention. However, the provision of Article 18 of the Berne Convention (1971) shall also apply, mutatis mutandis, to the rights of performers and producers of phonograms in phonograms.

SECTION 2: TRADEMARKS

Article 15 Practicable Subject Matter

1. Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other u undertakings shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colors as well as any combination of such signs, shall be eligible for registration as trademarks. Where signs are not inherently capable of distinguishing the relevant goods or services, Members may make registrability depend on distinctiveness acquired through use. Member may require, as a condition of registration, that signs be visually perceptible.
2. Paragraph 1 shall not be understood to prevent a Member from denying registration of a trademark on other grounds, provided that they do not derogate from the provisions of the Paris convention (1967).
3. Members may make registrability depend on use. However, actual use of a trademark shall not be a condition for filing and application for registration. An application shall not be refused solely on the ground that intended use has not taken place the expiry of a period of three years from the date of application.
4. The nature of the goods or services to which a trademark is to be applied shall in no case form an obstacle to registration of the trademark.
5. Members shall publish each trademark either before it is registered or promptly after it is registered and shall afford a reasonable

opportunity for petitions to cancel the registration. In addition, members may afford an opportunity for the registration of a trademark to be opposed.

Article 16 Rights conferred

1. The owner of a registered trademark shall have the exclusive right to prevent all third parties not having the owner's consent from using in the course of trade identical or similar signs for goods or services which are identical or similar to those in respect of which the trademark is registered where such use would result in a likelihood of confusion. In case of the use of an identical sign for identical goods or services, a likelihood of confusion shall be presumed. The rights described above shall not prejudice any existing prior rights, nor shall they affect the possibility of member making rights available on the basis of use.
2. Article 6bis of the Paris Convention (1967) shall apply, mutatis mustandis, to services. In determining whether a trademark is well known, Members shall take account of the knowledge of the trademark in the relevant sector of the public, including knowledge in the Member concerned which has been obtained as a result of the promotion of the trademark.
3. Article 6bis of the Paris Convention (1967) shall apply, Mutatis mutandis, to goods or services which are not similar to those in respect of which a trademark is registered, provided that use of that trademark in relation to those goods or services would indicate a connection between those goods or service and the owner of the

registered trademark and provided that the interests of the owner of the registered trademark are likely to be damaged by such use.

Article 17 Exceptions

Members may provide limited exceptions to the rights conferred by a trademark, such as fair use of descriptive terms, provided that such exceptions taken account of the legitimate interests of the owner of the trademark and of third parties.

Article 18 Terms of Protection

Initial registration and each renewal of registration, of a trademark shall be for term of no less than seven years. The registration of a trademark shall be renewable indefinitely.

1. If use is required to maintain a registration, the registration may be cancelled only after an uninterrupted period of at least three years of non-use, unless valid reasons based on the existence of obstacles to such use are shown by the trademark owner. Circumstances arising independently of the will of the owner of the trademark which constitute an obstacle to the use of the trademark, such as import restrictions on or other government requirements for goods or services protected by the trademark, shall be recognized as valid reasons for non-use.
2. When subject to the control of its owner, use of a trademark by another person shall be recognized as use of the trademark for the purpose of maintaining the registration.

Article 20 Other Requirements

The use of a trademark in the course of trade shall not be unjustifiably encumbered by special requirements, such as use with another trademark, use in a special from or use in a manner detrimental to its capability to distinguish the goods or service of one undertaking from those of other undertakings. This will not preclude a requirement prescribing the use of the trademark identifying the undertaking producing the goods or services along with, but without linking it to, the trademark distinguishing the specific goods or services in question of that undertaking.

Article 21 Licensing and Assignment

Members may determine conditions on the licensing and assignment of trademarks, it being understood that the compulsory licensing of trademarks shall not be permitted and that the owner of a registered trademark shall have the right to assign the trademark with or without the transfer of the business to which the trademark belongs.

SECTION: 3 GEOGRAPHICAL INDICATIONS

Article 22 Protection of Geographical indications

1. Geographical indications are, for the purposes of this Agreement, indications which identify a good as originating in the territory of a member, or a region or locality in the territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.
2. In respect of geographical indications, Members shall provide the legal means for interested parties to prevent:

a) The use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good;

b) Any use which constitutes and act of unfair competition within the meaning of Article 10bis of the Paris Convention (1967).

3. A Member shall, ex officio if its legislation so permits or at the request of an interested party, refuse or invalidate the registration of a trademark which contains or consists of a geographical indication with respect to goods not originating in the territory indicated, if use of the indication in the trademark for such goods in that Member is of such a nature as to mislead the public as to the true place of origin.

4. The protection under paragraphs 1, 2 and 3 shall be applicable against a geographical indication which, although literally true as to the territory, region or locality in which the goods originate falsely represents to the public that the goods originate in another territory.

Article 23 Additional Protection for Geographical Indications for Wines and Spirits

1. Each Member shall provide the legal means for interested parties to prevent use of a geographical indication identifying wines for wines not originating in the place indicated by the geographical indication in question or identifying spirits for spirits for spirits not originating in the place indicated by the geographical indication in question, even where the true origin of the goods is indicated or the geographical

indication is used in translation or accompanied by expressions such as "kind", "type", "style", "imitation" or the like.[65]

2. The registration of a trademark for wines which consists of a geographical indication identifying wines or for spirits which contains or consists or a geographical indication identifying spirits shall be refused or invalidated, ex officio if a Member's legislation so permits or at request of an interest party, with respect to such wines or spirits not having this origin.

3. In the case of homonymous geographical indications for wines, protection shall be accorded to each indication, subject to the provisions of paragraph 4 of Article 22. Each Member shall determine the practical conditions under which the homonymous indications in question will be differentiated from each other, taking into account the need to ensure equitable treatment of the producers concerned and that consumers are not misled.

4. In order to facilitate the protection of geographical indications for wines, negotiations shall be undertaken in the Council for TRAIPS concerning the establishment of a multilateral system of notification and registration of geographical indications for wines eligible for protection in those Members participating in the system.

Article 24 International Negotiations; Exceptions

1. Members agree to enter in negotiations aimed at increasing the protection of individual geographical indications under Article 23. The provisions of paragraphs 4 through 8 below shall not be used by a Member to refuse to conduct negotiations or to conclude bilateral or multilateral agreements. In the context of such

[65] Notwithstanding the first sentence of Article 42, Members may, with respect to these obligations, instead provide for enforcement by administrative action.

negotiations, Members shall be willing to consider the continued applicability of these provisions to individual geographical indications whose use was the subject of such negotiations.

2. The council for TRIPS shall keep under review the application of the provisions of this Section; the first such review shall take place within two years of the entry into force of the WTO Agreement. Any matter affecting the compliance with the obligations under these provisions may be drawn to the attention of the Council, with; at the request of a Member in respect of such matter is respect of which it has not been possible to find a satisfactory solution through bilateral or plurilateral consultations between the Members concerned. The council shall take such action as may be agreed to facilitate the operation and further the objectives of this section.

3. In implementing this section, a Member shall not diminish the protection of geographical indications that existed in that member immediately prior to the date of entry into force of the WTO Agreement.

4. Nothing in this section shall require a Member to prevent continued and similar use of a particular geographical indication of another member identifying wines or spirits in connection with goods or services by any of its nationals or domiciliary who have used that geographical indication in a continuous manner with regard to the same or related goods or services in the territory of the Member either (a) for at last 10 years preceding 15 April 1994 or (b) in good faith preceding that date.

5. Where a trademark has been applied for or registered in good faith, or where rights to a trademark have been acquired through use in the faith either:

a) Before the date of application of these provisions in that Member as defined in Part VI; or

b) Before the geographical indication is protected in its country of origin; measures adopted to implement this section shall not prejudice eligibility for or the validity of the registration of a trademark, or the right to use a trademark, on the basis that such as trademark is identical with, or similar to, a geographical indication.

6. Nothing in this section shall require a Member to apply its provisions in respect of a geographical indication of any other member with respect to goods or services for with the relevant indication is identical with the term customary in common language as the common name for such goods or services in the territory of that Member. Nothing is this section shall require a Member to apply its provisions in respect of a geographical indication of any other Member with respect to products of the vine for which the relevant indication is identical with the customary name of grape variety existing in the territory of the member as of the date of entry into force of the WTO agreement.

7. A Member may provide that any request made under this Section in connection with the use or registration of a trademark must be presented within five years after the adverse use of the protected indication has become generally know it that Member or after the date of registration of the trademark in that Member provided that the trademark has been published by that date, if such date is earlier than the date on which the adverse use become generally known in that Member, provided that the geographical indication is not used or registered in bad faith.

8. The provisions of this Section shall in no way prejudice the right of any person the use, in the course of trade, that person's name or the name of the person's predecessor in business, except where such name is used in such a manner as to mislead the public.

9. There shall be no obligation under this agreement to protect geographical indications which are not or cease to be protected in their country of origin, or which have fallen into disuse in that country.

SECTION 4: INDUSTRIAL DESIGNS

Article 25 Requirements for protection

1. Members shall provide for the protection of independently created industrial designs that are new or original. Members may provide that designs are not new or original if they do not significantly differ from known designs or combinations of know design feature. Members may provide that such protection shall not extend to designs dictated essentially by technical or functional considerations.

2. Each Member shall ensure that requirements for securing protection for textile designs, in particular in regard to any cost, examination or publication, do not unreasonably impair the opportunity to seek and obtain such protection. Members shall be free to meet this obligation through industrial design law or through copyright law.

Article 26 Protection

1. The owner of a protected industrial design shall have the right to prevent third parties not having the owner's consent from making, selling or importing articles bearing or embodying a design which

is a copy, or substantially a copy, of the protected design, when such acts are undertaken for commercial purposes.

2. Members may provide limited exceptions to the protection of industrial designs, provided that such exceptions do not unreasonably conflict with the normal exploitation of protected industrial designs and do not unreasonably prejudice the legitimate interests of the owner of the protected design, taking account of the legitimate interests of third parties.

3. The duration of protection available shall to at least 10 years.

SECTION 5: PATENTS

Article 27 Patentable Subject Matter

1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.[66] Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.

2. Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect order public or morality, including to protect human, animal or plant life or health or to avoid serious

[66] For the purpose of this Article, the terms "inventive step" and "capable of industrial application" may be deemed by a Member to be synonymous with the terms "non-obvious" and "useful" respectively.

prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.

3. Members may also exclude from patentability:

    a) Diagnostic, therapeutic and surgical methods for the treatment of humans or animals;

    b) Plants and animals other than micro-organisms, and essentially biological processes for the processes for the production of plants or by an effective sui gneris system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO agreement.

Article 28 Rights Conferred

1. A patent shall confer on its owner the following exclusive rights:

    a) Where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling or importing[67] for these purposes that product;

    b) Where the subject matter of patent is a process, to prevent third parties not having the owner's consent from the act of using the process, and from the acts of: using, offering form sale, selling, or importing for these purposes at least the product obtained directly by that process.

2. Patent owners shall also have the right to assign, or transfer by succession, the patent and to conclude licensing contracts.

[67] This right, like all other rights conferred under this agreement in respect of the use, sale, importation or other distribution of goods, is subject to the provisions of Article 6.

Article 29 Conditions on Patent Applicants

a. Members shall require that an applicant for a patent shall disclose the invention in a manner sufficiently clear and complete for the invention to the carried out by a person skilled in the art and may require the applicant to indicate the best mode for carrying out the invention known to the inventor at the filing date or, where priority is claimed, at the priority date of the application.

b. Members may require an applicant for a patent to provide information concerning the applicant's corresponding foreign applications and grants.

Article 30 Exceptions to Rights Conferred

Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties.

Article 31 Other Use without Authorization of the Right Holder

Where the law of a member allows for other use[68] of the subject matter of a patent without the authorization of the right holder, including use by the government or third parties authorized by the government, the following provisions shall be respected:

a) Authorization of such use shall be considered on its individual merits;

[68] "Other use" refers to use other than that allowed under Article 30.

b) Such use may only be permitted of, prior to such use, the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time. This requirement may be waived by a member in the case of national emergency or other circumstances of extreme urgency or in cases of public noncommercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonable practicable. In the case of public non-commercial use, where the government or contractor, without making a patent search, knows or has demonstrable grounds to know that a valid patent is or will be used by or for the government, the right holder shall be informed promptly;

c) The scope and duration of such use shall be limited to the purpose for which it was authorized, and in the case of semi-conductor technology shall only be for public non-commercial use or to remedy a practice determined after judicial or administrative process to be anti-competitive;

d) Such use shall be non-exclusive;

e) Such use shall be no-assignable, except with that part of the enterprise or goodwill which enjoys such use;

f) Any such use be authorized predominantly for the supply of the domestic market of the Member authorizing such use;

g) Authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons

so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of these circumstances;

h) The right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization;

i) The legal validity of any decision relating to the authorization of such use shall be subject to judicial review or other independent review by a distinct higher authority in that member;

j) Any decision relating to the remuneration provided in respect of such use shall be subject to judicial review or other independent review by a distinct higher authority in that member;

k) Members are not obliged to apply the conditions set forth in subparagraphs (b) and (f) where such use it permitted to remedy a practice determined after judicial or administrative process to be anti-competitive. The need to correct anti-competitive practices may be taken into account in determining the amount of remuneration in such cases. Competent authorities shall have the authority to refuse termination of authorization if and when the conditions which led to such authorization are likely to recur;

l) Where such use is authorized to permit the exploitation of a patent ("the second patent") which cannot be exploited

without infringing another patent ("the first patent"), the following additional conditions shall apply:

(i) The invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent;

(ii) The owner of the first patent shall be entitled to a cross-license on reasonable terms to use the invention claimed in the second patent; and

(iii) The use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent.

Article 32 Revocation/Forfeiture

An opportunity for judicial review of any decision to revoke or forfeit a patent shall be available.

Article 33 Terms of Protection

The term of protection available shall not end before the expiration of a period of twenty year counted from the filing date.[69]

Article 34 Process Patents: Burden of Proof

1. For the purposes of civil proceedings in respect of the infringement of the rights of the owner referred to in paragraph 1(b) of Article 28, if the subject matter of a patent is a process for obtaining a product, the judicial authorities shall have the authority to other the defendant to prove that the process to obtain and identical product

[69] It is understood that those Members which do not have a system of original grant may provide that the term of protection shall be computed from the filling date in the system of original grant.

is different from the patented process. Therefore, Members shall provide, in at least one of the following circumstances, that any identical produce when produced without consent of the patent owner shall, in the absence of proof to the contrary, be deemed to have been obtained by the patented process:

(a) If the product obtained by the patented process is new;

(b) If there is a substantial likelihood that the identical product was made by the process and the owner of the patent has been unable through reasonable efforts to determine the process actually used.

2. Any Member shall be free to provide that the burden of proof indicated in paragraph 1 shall be on the alleged infringer only if the condition referred to in subparagraph (a) is fulfilled or only if the condition referred to in subparagraph (b) is fulfilled.

3. In the adduction of proof to the contrary, the legitimate interests of defendants in protecting their manufacturing and business secrets shall be taken into account.

SECTION 6: LAYOUT-DESIGNS (TOPOGRAPHIES) OF INTEGRATED CIRCUITS

Article 35 Relation to the IPIC Treaty

Members agree to provide protection to the layout-designs (topographies) of integrated circuits (referred to in this Agreement as "layout-designs") in accordance with Article 2 through 7 (other than paragraph3 of Article 6), Article 12 and paragraph 3 of Article 16 of the Treaty on intellectual Property in Respect of Integrated Circuits and, in addition, to comply with the following provisions.

Article 36 Scope of the Protection

Subject to the provisions of paragraph 1 of Article 37, Members shall consider unlawful the following acts if performed without the authorization of the right holder:[70] importing, selling, or otherwise distributing for commercial purpose a protected layout-design, and integrate circuit in which a protected layout-design is incorporated, or an article incorporating such an integrated circuit only in so far as it continues to contain unlawfully reproduced layout-design.

Article 37 Acts Not Requiring the Authorization of the Right Holder

1. Notwithstanding Article 36, no Member shall consider unlawful the performance of any of the acts referred to in that Article in respect of and integrated circuit incorporating an unlawfully reproduced layout-design or any article incorporating such an integrated circuit where the person performing or ordering such acts did not know and had no reasonable ground to know, when

[70] The term "right holder" in this section shall be understood as having the same meaning as the term "holder of the right" in the IPIV Treaty.

acquiring the integrated circuit or article incorporating such an integrated circuit, that is incorporated an unlawfully reproduced layout-design. Members shall provided that, after the time that such person has received sufficient notice that the layout-design was unlawfully reproduced, that person may perform any of the acts with respect to the stock on hand or ordered before such time, but shall be liable to pay to the right holder a sum equivalent to a reasonable royalty such as would be payable under a freely negotiated license in respect of such a layout-design.

2. The conditions set out in subparagraphs (a) through (k) of Article 31 shall apply mutatis mutandis in the event of any non-voluntary licensing of a layout-design or of its use by or for the government without the authorization of the right holder.

Article 38 Terms of Protection

1. In Members requiring registration as a condition of protection, the term of protection of layout-designs shall not end before the expiration of a period of 10 years counted from the date of filing an application for registration or from the first commercial exploitation wherever in the world it occurs.
2. In Members not requiring registration as a condition for protection, layout-designs shall be protected for a term of no less than 10 years from the date of the first commercial exploitation wherever in the world it occurs.
3. Notwithstanding paragraphs 1 and 2, a Member may provide that protection shall laps 15 years after the creation of the layout-design.

SECTION 7: PROTECTION OF UNDISCLOSED INFORMATION

Article 39

1. In the course of ensuring effective protection against unfair competition as provided in Article 10bis of the Paris Convention (1967), Members shall protect undisclosed information in accordance with paragraph 2 and data submitted to governments or governmental agencies in accordance with paragraph 3.

2. Natural and legal persons shall have the possibility of preventing information lawfully within their control from being disclosed to, acquired by or used by others without their consent in a manner contrary to honest commercial practices [71] so long as such information:

(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.

3. Members, when requiring, as a condition of approving the marking of pharmaceutical or of agricultural chemical produces which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which involves a considerable effort, shall protect such data against disclosure, except where necessary

[71] For the purpose of the provision, "a manner contrary to honest commercial practices" shall mean at least practices such as breach of confidence and inducement to breach, and includes the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition.

to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use.

SECTION 8: CONTROL OF ANTI-COMPETITIVE PRACTICES IN CONTRACTUAL LICENSES

Article 40

1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.

2. Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular case constitute and abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grant back conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member.

3. Each Member shall enter, upon request, into consolations with any other Member which has cause to believe that an intellectual property right owner that is a national or domiciliary of the Member to which the request for consultations has been addressed is undertaking practices in violation of the requesting Member’s laws and regulations on the subject matter of this Section, and which wishes to

secure compliance with such legislation, without prejudice to any action under the law and to the full freedom of a ultimate decision of either Member. The Member addressed shall accord full and sympathetic consideration to, and shall afford adequate opportunity for, consolations with the requesting Member, and shall cooperate through supply of publicly available non-confidential information of relevance to the matter in question and of other information available to the Member, subject to domestic law and to the conclusion of mutually satisfactory agreements concerning the safeguarding of its confidentiality by the requesting Member.

4. A Member whose nationals or domiciliary are subject to proceeding in another Member concerning alleged violations of that other Member's laws and regulations on the subject matter of this section shall, upon request, be granted an opportunity for consultations by the other Member under the same conditions as those foreseen in paragraph 3.

PART III

ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS

SECTION 1: GENERAL OBLIGATIONS

Article 41

1. Members shall ensure that enforcement procedures as specified in this Part are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to

further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.

2. Procedures concerning the enforcement of intellectual property rights shall be fair and equitable. They shall not be unnecessarily complicated or costly, or entail unreasonable time-limits or unwarranted delays.

3. Decisions on the merits of a case shall preferably be in writing and reasoned. They shall be made available at least to the parties to the proceeding without undue delay. Decisions on the merits of a case shall be based only on evidence in respect of which parties were offered the opportunity to be heard.

4. Parties to a proceeding shall have an opportunity for review by a judicial authority of final administrative decisions and, subject to jurisdictional provisions in a Member's law concerning the importance of a case, of at least the legal aspects of initial judicial decisions on the merits of a case. However, there shall be no obligation to provide an opportunity fore review of acquittals in criminal cases.

5. It is understood that this Part does not create any obligation to put in place a judicial system for the enforcement of intellectual property rights distinct from that for the enforcement of law in general, nor does it affect the capacity of Members to enforce their law in general. Nothing in this part creates any obligation with respect to the distribution of resources as between enforcement of intellectual property rights and the enforcement of law in general.

SECTION 2: CIVIL AND ADMINISTRATIVE PROCEDURES AND REMEDIES

Article 42 Fair and Equitable Procedures

Members shall make available to right holders[72] civil judicial procedures concerning the enforcement of any intellectual property right covered by this Agreement. Defendants shall have the right to written notice which is timely and contains sufficient detail, including the basis of the claims. Parties shall be allowed to be represented by independent legal counsel, and procedures shall not impose overly burdensome requirements concerning mandatory personal appearances. All parties to such procedures shall be duly entitled to substantiate their claims and to present all relevant evidence. The Procedure shall provide a means to identify and protect confidential information, unless this would be could be country to existing constitutional requirements.

Article 43 Evidence

1. This judicial authorities shall have the authority, where a party has presented reasonably available evidence sufficient to support its claims and has specified evidence relevant to substantiation of its claims which lies in the control of the opposing party, to order that this evidence be produced by the opposing party, subject in appropriate cases to conditions which en sure the protection of confidential information.
2. In cases in which a party to a proceeding voluntarily and without good reason refuses access to, or otherwise does not provide necessary information within a reasonable period, or significantly

[72] For the purpose of this Part, the term "right holder" includes federations and associations having legal standing to assert such rights.

impedes a procedure relating to an enforcement action, a Member may accord judicial authorities the authority to make preliminary and final determinations, affirmative or negative, on the basis of the information presented to them, including the complaint or the allegation presented by the party adversely affected by the denial of access to information, subject to providing the parties an opportunity to be heard on the allegations or evidence.

Article 44 Injunctions

1. The judicial authorities shall have the authority to order a party to desist from an infringement, inter alias to prevent the entry into the channels of commerce in their jurisdiction of imported goods that involve the infringement of an intellectual property right, immediately after customs clearance of such goods. Members are not obliged to accord such authority in respect of protected subject matter acquired or ordered by a person prior to knowing or having reasonable grounds to know that dealing in such subject matter would entail the infringement of an intellectual property right.
2. Notwithstanding the other provisions of this Part and provided that the provisions of Part II specifically addressing use by governments ,or by third parties authorized by a government, without the authorization the right holder are complied with, members may limit the remedies available against such use to payment of remuneration in accordance with subparagraph (h) of Article 31. In other cases, the remedies under this Part shall apply or, where these remedies are inconsistent with a Member's law, declaratory judgments and adequate compensation shall be available.

Article 45 Damages

1. The judicial authorities shall have the authority to order the infringer to pay the right holder damages adequate to compensate for the injury the right holder has suffered because of an infringement of that person's intellectual property right by an infringer who knowingly, or with reasonable grounds to know, engaged in infringing activity.

Article 46 Other Remedies

In order to create an effective deterrent to infringement, the judicial authorities shall have the authority to order that goods that they have found to be infringing be, without compensation of any sort, disposed of outside the channels of commerce in such a manner as to avoid any harm caused to the right holder, or, unless this would be contrary to existing constitutional requirements, destroyed. The judicial authorities shall also have the authority to order that materials and implements the predominant use of which has been in the creation of the infringing goods be without compensation of any sort, disposed of outside the channels of commerce in such a manner as to minimize the risks of further infringements. In considering such requests, the need for proportionality between the seriousness of the infringement and the remedies ordered as well as the interests of third parties shall be taken into account. In regard to counterfeit trademark goods, the simple removal of the trademark unlawfully affixed shall not be sufficient, other than in exceptional cases, to permit release of the goods into the channels of commerce.

Article 47 Right of Information

Members may provide that the judicial authorities shall have the authority, unless this would be out of proportion to the seriousness of the infringement, to order the infringer to inform the right holder of the identity of third persons involved in the production and distribution of the infringing goods or services and of their channels of distribution.

Article 48 Indemnification of the Defendant

1. The judicial authorities shall have the authority to order a party at whose request measures were taken and who has abused enforcement procedures to provide to a party wrongfully enjoined or restrained adequate compensation for the injury suffered because of such abuse. The judicial authorities shall also have the authority to order the applicant to pay the defendant expenses, which may include appropriate attorney's feels.
2. In respect of the administration of any law pertaining the protection or enforcement of intellectual property rights, Members shall only exempt both public authorities and officials from liability to appropriate remedial measures where actions are taken or intended in good faith in the course of the administration of that law.

Article 49 Administrative Procedures

The competent authorities shall have the authority to require an applicant to provide a security or equivalent assurance sufficient to protect the defendant and the competent authorities and to prevent abuse. Such security of equivalent assurance shall not unreasonably deter recourse to these procedures.

1. Where pursuant to an application under this Section the release of goods involving industrial designs, patents, layout-designs or undisclosed information into free circulation has been suspended by customs authorities on the basis of a decision other than by a judicial or other I dependent authority, and the period provided for in Article 55 has expired without the g ranting of provisional relief by the duly empowered authority, and provided that all other conditions for importation have been complied with, the owner, importer, or consignee of such goods shall be entitled to their release on the posting of a security in an amount sufficient to protect the right holder for any infringement. Payment of such security shall not prejudice any other remedy available to right holder, it being understood that the security shall be released if the right holder fails to pursue the right of action within a reasonable period of time.

Article 54 Notice of Suspension

The importer and the applicant shall be promptly notified of the suspension of the release of goods according to Article 51.

Article 55 Duration of Suspension

If, within a period exceeding 10 working day after the applicant has been served notice of the suspension, the customs authorities have not been informed that proceedings leading to a decision on the merits of the case have been initiated by a party other than the defendant, or that the duly empowered authority has taken provisional measures prolonging the suspension of the release of the goods, the goods shall be released, provided that all other conditions for importation or exportation have

been complied with; in appropriate cases, this time-limit may be extended by another 10 working days. If proceedings leading to decision on the merits of the case have been initiated, a review, including a right to be heard, shall take place upon request of the defendant with a view to deciding, within a reasonable period, whether these measures shall be modified, revoked or confirmed. Notwithstanding the above, where the suspension of the release of goods is carried out or continued in accordance with a provisional judicial measure, the provisions of paragraph 6 of Article 50 shall apply.

Article 56 indemnification of the Importer and of the Owner of the goods

Relevant authorities shall have the authority to order the applicant to pay the importer, the consignee and the owner of the goods appropriate compensation for any injury caused to them through the wrongful detention of goods or through the detention of goods released pursuant Article 55.

Article 57 Right of Inspection and information

Without prejudice to the protection of confidential information, Members shall provide the competent authorities the authority to give the right holder sufficient opportunity to have any goods detained by the customs authorities inspected in order to substantiate the right holder's claims. The competent authorities shall also have authority to give the importer an equivalent opportunity to have any such goods inspected. Where a positive determination has been made on the merits of a case, Member may provide to competent authorities the authority to inform the right holder of the names and addresses of the consignor, the importer and the consignee and of the quantity of the goods in question.

Article 58 Ex Officio Action

Where Members require competent authorities to act upon their initiative and to suspend the release of goods in respect of which they have acquired prima facie evidence that an intellectual property right is being infringed:

(a) The competent authorities may at any time seek from the right holder any information that may assist them to exercise these powers;

(b) The importer and the right holder shall be promptly notified of the suspension. Where the importer has lodged an appeal against the suspension with the competent authorities, the suspension shall be subject to the conditions, mutatis mutandis, set out at Article 55;

(c) Members shall only exempt both public authorities and officials from liability to appropriate remedial measures where action s are taken or intended in good faith.

Article 59 Remedies

Without prejudice to other rights of action open to the right holder and subject to the right of the defendant to seek review by a judicial authority, competent authorities shall have to authority to order the destruction or disposal of infringing goods in accordance with the principles set out it Article 46. In regard to counterfeit trademark goods, the authorities shall not allow the exportation of the infringing goods in an unaltered state or subject them to a different customs procedure, other than in exceptional circumstances.

Article 60 De Minimis Imports

Members may exclude from the application of the above provisions small quantities of goods of a non-commercial nature contained in travelers' personal luggage or sent in small consignments.

SECTION 5: CRIMINAL PROCEDURES

Members shall provide for criminal procedures and penalties to be applied at least in case of willful trademark counterfeiting of copyright piracy on a commercial scale. Remedies available shall include imprisonment and/or monetary fines sufficient to provide a deterrent, consistently with the level of penalties applied for crimes of a corresponding gravity. In appropriate cases, remedies available shall also include the seizure, forfeiture and destruction of the infringing goods and of any materials and implements the predominant use of which has been in the commission of the offence. Members may provide for criminal procedures and penalties to be applied in other cases of infringement of intellectual property rights, in particular where they are committed willfully and on a commercial scale.

PART IV ACQUISITION AND MAINTENANCE OF INTELLECTUAL PROPERTY RIGHTS AND RELATED INTER-PARTS PROCEDURES

Article 62

1. Members may require, as a condition of the acquisition or maintenance of the intellectual property rights provided for under sections 2 through 6 of Part II, compliance with reasonable

procedures and formalities. Such procedures and formalities shall be consistent with the provisions of this Agreement.

2. Where the acquisition of an intellectual property right is subject to the right being granted or registered, Members shall ensure that the procedures for grant or registration, subject to compliance with the substantive conditions for acquisition of the right, permit the granting or registration of the right within a reasonable period of time so as to avoid unwarranted curtailment of the period of protection.

3. Article 4 of the Paris Convention (1967) shall apply mutatis mutandis to service marks.

4. Procedures are concerning the acquisition or maintenance of intellectual property rights and where a Member's law provides for such procedures, administrative revocation and inter procedures such as opposition, revocation and cancellation, shall e be governed by the general principles set out in paragraphs 2 and 3 of Article 41.

5. Final administrative decisions in any of the procedures referred to under paragraph 4 shall be subject to review by a judicial or quasi-judicial authority. However, there shall be no obligation to provide an opportunity for such review of decisions in cases of unsuccessful opposition or administrative revocation, provided that the grounds for such procedures can be the subject or invalidation procedures.

PARTY V DISPUTE PREVENTION AND SETTLEMENT

Article 63 Transparency

1. Laws and regulations, and final judicial decisions and administrative rulings of general application, made effective by a Member pertaining to the subject matter of this Agreement (the availability, scope, acquisition, enforcement and prevention of the abuse of intellectual property rights) shall be published, or where such publication in not practicable made publicly available, in a national language, in such a manner as to enable governments and right holders to become acquainted with them. Agreements concerning the subject matter of this agreement which are in force between the government or a governmental agency of a Member and the government or a governmental agency of member and the government or a governmental agency of another Member shall also be published.

2. Members shall notify the laws and regulations referred to in paragraph 1 to the Council for TRIPS in order to assist that Council in its review of the operation of this Agreement. The Council shall attempt to minimize the burden on Members in carrying out this obligation and may decide to waive the obligation to notify such laws and regulation directly to the Council if consultations with WIPO on the establishment of a common register containing these laws and regulation are successful. The council shall also consider in this connection any action required regarding notifications pursuant to the obligations under this Agreement stemming from the provisions of Article 6ter of the Paris Convention (1967).

3. Each Member shall be prepared to supply, in response to a written request from another Member, information of the sort referred to in

paragraph 1. A member, having reason to believe that a specific judicial decision or administrative ruling or bilateral agreement in the area of intellectual property rights affects its rights under this agreement, may also request in writing to be given access to or be informed in sufficient detail of such specific judicial decisions or administrative rulings or bilateral agreements.

4. Nothing in paragraphs, 1, 2, and 3 shall require members to disclose confidential information which would impede law enforcement or otherwise be contrary to the public interest or would prejudice the legitimate commercial interest of particular enterprises, public or private.

Article 64 Dispute Settlement

1. The provision of Article XXII and XXIII of GATT 1994 as elaborated and applied by the Dispute Settlement Understanding shall apply to consultations and the settlement of disputes under this Agreement except as otherwise specifically provided herein.
2. Subparagraphs 1(b) and 1 (c) of Article XX III of GATT 1994 shall not apply to the settlement of disputes under this Agreement for a period of five years from the date of entry into force of the WTO Agreement.
3. During the time period referred to in paragraph 2, the Council for TRIPS shall examine the scope and modalities for complaints of the type provided for under subparagraphs 1 (b) and 1 (c) of Article XXIII of GATT 1994 made pursuant to this Conference for approval. Any decision of the Ministerial Conference to approve such recommendations or to extend the period in paragraph 2 shall be made only by consensus, and approved recommendations shall

be effective for all Members without further formal acceptance process.

PART VI TRANSITIONAL ARRANGEMENTS

Article 65 Transitional Arrangements

1. Subject to the provisions of paragraphs 2, 3 and 4, no Member shall be obliged to apply the provision of this Agreement before the expiry of a general period of one year following the date of entry into force of the WTO Agreement.
2. A developing country Member is entitled to delay for a further period of four years the date of application, as defined in paragraph 1, of the provisions of this Agreement other than Articles 3, 4 and 5.
3. Any other Member which is in the process of transformation from a centrally-planned into a market, free-enterprise economy and which is undertaking structural reform of its intellectual property system and facing special problems in the preparation and implementation of intellectual property laws and regulations may also benefit from a period of delay as foreseen in paragraph 2.
4. To the extent that a developing country Member is obliged by this Agreement to extend product patent protection to areas of technology not so protectable in its territory on the general date of application of this Agreement for that Member, as defined in paragraph 2, it may delay the application of the provisions on product patents of Section 5 of Part II to such areas of technology for an additional period of five years.
5. A member availing itself of a transitional period under paragraphs 1, 2, 3 or 4 shall ensure that any changes in its laws, regulation and

practice made during that period do not result in a lesser degree of consistency with the provisions of this agreement.

Article 66 Least-Developed Country Members

1. In view of the special needs and requirements of least-developed country. Members, their economic, financial administrative constraints, and their need for flexibility to create a viable technological base, such members shall not be required to apply the provisions of this Agreement, other then Articles 3, 4 and 5, for a period of 10 years from the date of application as defined under paragraph 1 of Article 65. the council for TRIPS shall, upon duly motivated request by a least-developed country Members, accord extensions of this period.
2. Developed country Members shall provide incentives to enterprises and institutions in their e\territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base.

Article 67 Technical Cooperation

In order to facilitate the implementation of this Agreement, development country Members shall provide, on request and on mutually agreed terms and conditions, technical and financial cooperation in favor of developing and least-development country Members. Such cooperation shall include assistance in the preparation of laws and regulations on the protection and enforcement of intellectual property rights as well as on the prevention of their abuse, and shall include support regarding the establishment or

reinforcement of domestic offices and agencies relevant to these matters, including the training of personnel.

PRAT VII INSTITUTIONAL ARRANGEMENTS; FINAL PROVISIONS

Article 68 Council for Trade-Related Aspects of Intellectual Property Rights

The council for TRIPS shall monitor the operation of this Agreement and, in particular, Members' compliance with their obligations hereunder, and shall afford Member the opportunity of consulting on matters relating to the trade-related of intellectual property rights. It shall carry out such other responsibilities as assigned to it by the Members, and it shall, in particular, provide any assistance requested by them in the context of dispute settlement procedures. In carrying out its functions, the Council for TRIPS may consult with and seek information from any source it deems appropriate. In consolation with WIPO, the Council shall seek to establish, within one year of its first meeting, appropriate arrangements for cooperation with bodies of that Organization.

Article 69 International Cooperation

Members agree to cooperate with each over with a view to eliminating international trade in goods infringing intellectual property rights. For this purpose, they shall establish and notify contact points in their administrations and be ready to exchange information on trade in infringing goods. They shall, in particular, promote the exchange of information and cooperation between customs authorities with regard to trade in counterfeit trademark goods and pirate copyright goods.

Article 70 Protection of Existing Subject Matter

1. This Agreement does not give rise to obligations in respect of acts which occurred before the date of application of the Agreement for the Member in question.

2. Except as otherwise provided for in this Agreement, this Agreement gives rise to obligations in respect of all subject matter existing at the date of application of this Agreement for the Member in question, and which is protected in that Member on the said date, or which meets or comes subsequently to meet the criteria for protection under the terms or this Agreement. In respect of this paragraph and paragraphs 3 and 4, copyright obligations with respect to existing works shall be solely determined under Article 18 of the Berne Convention (1971), and obligations with respect to the rights of producers of phonograms and performs in existing phonograms shall be determined solely under Article 18 of the Berne Convention (1971) as made applicable under paragraph 6 of Article 14 of this Agreement.

3. There shall be no obligation to restore protection to subject matter which on the date of application of this Agreement for the Member in question has fallen into the public domain.

4. In respect of any acts in respect of specific objects embodying protected subject matter which become infringing under the terms of legislation in conformity with this Agreement, and which were commenced, or in respect of which a significant investment was made, before the date of acceptance of the WTO Agreement by that Member, any Member many provide for a limitation of the remedies

available to the right holder as to the continued performance of the acts after the date of application of this Agreement for that Member. In such cases the Member shall, however, at least provide for the payment of equitable remuneration.

5. A member is not obliged to apply the provisions of Article 11 and of paragraph 4 of Article 14 with respect to originals or copies purchased prior to the date of application of this Agreement for that Member.

6. Members shall not be required to apply Article 31, or the requirement in paragraph 1 of Article 27 that patent rights shall be enjoyable without discrimination as to the field of technology, to use without the authorization of the right holder where authorization for such use was granted by the government before the date this Agreement became known.

7. In the case of intellectual property rights for which protection is conditional upon registration, applications for protection which are pending on the date or application of this Agreement for the member in question shall be permitted to be amended to claim any enhanced protection provided under the provisions of this Agreement. Such amendments shall not include new matter.

8. Where a Member does not make available as of the date of entry into force of the WTO Agreement patent protection for pharmaceutical and agricultural chemical products commensurate with its obligations under Article 27, that Member shall:

(a) Notwithstanding the provisions of Part VI, provide as from the date of entry into force of the WTO Agreement a means by which applications for patents for such inventions can be filled.

(b) Apply to these applications, as of the date of application of this Agreement, the criteria for patentability as laid down in this agreement as if those criteria were being applied on the date of filing in that Member or, where priority is available and claimed, the priority date of the application; and

(c) Provide patent protection in accordance with this Agreement as from the Grant of the patent and for the remainder of the patent term, counted from the filing date in accordance with Article 33 of this Agreement, for those of these applications that meet the criteria for protection refereed to in subparagraph (b).

9. Where a product is the subject of a patent application in a Member in accordance with paragraph 8 (a), exclusive marketing rights shall be granted, notwithstanding the provisions of Part VI, for a period of five years after obtaining marketing approval in the Member or until a product patent is granted or rejected in that Member, whichever period is shorter, provided that, subsequent to the entry into force of the WTO Agreement, a patent Application has been field and a patent granted for that product in another Member and marketing approval obtained in such other Member.

Article 71 Review and Amendment

1. The Council for TRIPS shall review the implementation of this Agreement after the expiration of the transitional period referred to in paragraph 2 of Article 65. The Council shall, having regard to the experience gained in its implementation, review it two years after that date and at identical intervals thereafter. The council may also undertake reviews in the light of any relevant new developments which might warrant modification or amendment of this Agreement.
2. Amendments merely serving the purpose of adjusting to higher levels of protection of intellectual property rights achieved, and in force, in other multilateral agreements and accepted under those agreements by all Members of the WTO may be referred to the Ministerial Conference for action in accordance with paragraph 6 of Article X of to WTO Agreement on the basis a consensus proposal from the Council for TRIPS.

Article 72 Reservations

Reservations may not be entered in respect of any of the provisions of this Agreement without the other Members.

Article 73 Security Exceptions

Nothing in this Agreement shall be construed:

(a) To require a Member to furnish any information the disclosure of which it considers contrary to its essential security interests: or

(b) To prevent a Member from taking any action which it considers necessary for the protection of its essential security interest;

(i) Relating to fissionable materials or the materials from which they are derived;

(ii) Relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;

(iii) Taken in time of war or other emergency in international relations; or

(iv) To prevent a Member from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

ANNEX - 2

INTERNATIONAL TREATIES REGARDING FARMERS'S RIGHTS

2.1 International Treat on plant Genetic

Resources for food and Agriculture (ITPGRFA)

The international treaty on plant Genetic Resources for food and Agriculture (ITPGRFA) is a global treaty that aims to ensure food security and sustainable agriculture. The treaty was approved by the United Nations food and agriculture organization (FAO) conference of 180 nations at its thirty first session meeting on 3 Nov 2001. The treaty come into force on 29 June 2004 and is now at the implementation phase. The treaty is historic because it represents a legally binding international commitment on the management of the world's key food crops and agriculture biodiversity for food and sustainable agriculture.

The treaty aims at the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) and the fair and equitable sharing of benefits arising of their use in harmony with the convention on Biological diversity (CBD) (FAO;2002). The treaty also recognizes the countries sovereign rights over their plant genetic resources. The basic features of the treaty are multilateral system of Access and Benefit sharing and provisions of farmers' rights. it recognizes the enormous contribution that farmers and the farming communities have made and will continue to make to the conservation and development of plant genetic resources, and gives national governments the responsibility of establishing farmers' rights the treaty acknowledges that the conservation, exploration collection, characterization, evaluation and documentation of PGRFA are essential in meeting the goals of food security and for the

present and future generations. It also acknowledges that PGRFA are the raw materials indispensable for crop genetic improvement and estabililishes the multilateral system for facilitated access.

Source: Adapted from SAWTEE.

2.2 The convention on Biological Diversity (CBD)

The CBD, which entered in to force in 1993, has as its three objectives, "The conservation of biological diversity, and the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources". Intellectual property rights and particularly patents are considered to be most relevant to the third of these objectives that of fair and equitable benefit sharing. The TRIPS agreement concluded after the entry into force of the CBD does not require the establishment of any mechanisms to ensure fair and equitable benefit sharing with states and the holders of traditional knowledge.

The most important parts of the convention here are Article 15 and 8(J). Article 15 recognizes the sovereign rights of states over their natural resources and their authority to determine access to genetic resources and that access where granted shall be on mutually agreed terms and subject to prior informed consent of the provider party. Article 8(J) requires parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional life styles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holder of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

Adapted from www.ictsp.org

2.3 UPOV (International Union for the Protection of New Varieties of Plants)

The original UPOV convention of 1961 has been subsequently revised in 1972, 1978 and 1991. All members of the UPOV today are either party to the 1978 or 1991 Act which came into force in April 1998. After 1999, any country wishing to join UPOV has to adhere to the terms of 1991 version. The 1978 version honored the right of farmers to re-sow seed harvested from protected varieties for their own use (farmers' privileges). The farmers are permitted to re-use propagating material from the precious year's harvest and can freely exchange seeds of protected varieties with other farmers. Plant breeders are also allowed to use the protected variety in order to breed and commercialize other new varieties. The 1991 version of the UPOV has further strengthened PBRs and conversely restricted the farmers' privilege. It ex tends, for instance, breeders' rights to all production and reproduction of their varieties, and to species and well as general and specific plant varieties. Farmers' right to save seed is no longer guaranteed. Through the successive revisions of the UPOV convention, the protection offered to plant breeders has become more and more similar to patent rights to plants.[73]

2.4 CoFaB (Convention of Farmers and Breeders)

There has been another major initiative by Gene campaign in drafting an alternate mechanism for the protection of farmers' right i.e. convention of farmers and breeder (CoFaB). The United Nation Development programmes (UNDP) has recognized CoFaB as a strong and coordinated international proposal in response to UPOV.

[73] GAIA Foundation and GRAIN (1998b), "Ten Reasons not to Join UPOV," No. 10 Global Trade and Biodiversity in conflict.

Unlike the provision of UPOV, the CoFaB treaty seeks to fulfill the following goals.

- Provide reliable, good quality seeds to the small and large farmers.
- Maintain genetic diversity in the field.
- Provide for breeders of new varieties to have protection for their varieties in the market, without prejudice to public interest.
- Acknowledge the enormous contribution of farmers to the identification, maintenance and refinement of germplasm.
- Acknowledge the role of farmers as creators of land races and traditional varieties which form the foundation of agriculture and modern plant breeding.
- Emphasize that the counties of the tropics are germplasm owing countries and the primary source of agricultural varieties and rights accruing from their respective contribution to the creation of new varieties.
- Develop a system where in farmers and breeders have recognition

Adapted from: Suman Sahai, 2003.

ANNEX -3

WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO)

WIPO was established by a convention of 1 July 1967, which entered into force in 1970. It has been a specialized agency of the United Nations since 1974.administers a number of international union or treaties in the area of intellectual property, such as the Paris[74] and Berne[75]conventions. WIPO'S objectives are to promoted intellectual protections through out the world through corporation among states and, where appropriate, in collaboration with any international organization.

WIPO also aims to encourage administrative co-operation among the intellectual property Unions created by the Paris and Berne conventions and sub-treaties concluded by the members to comply with the substantive obligators of the main convention of WIPO- the Paris convention on industrial property and the Berne convention on copy right (in their mood recent versions).

With regard to co-operation on intellectual property issues their has been an Agreement between WIPO and the WTO , which came into force on one January 1996 the Agreement provides co-operation in their main areas: notification of, access to and translation of National laws and regulations: implementation of procedures for the protection of national emblems: and technical co-operation. (www.wto.org) the WIPO intergovernmental committee (IGE) dealt with a range of issues concerning the interplay between intellectual property and genetic resource. The work of the ICG covers their main areas:

[74] The Paris convention deals with the protection of industrial rights and came into being in 1883
[75] The Berne convention deals with rights concerning artistic and literary works came into being in 1886.

Plant protection of genetic resources through measures, which prevent the grant of patents over genetic resources that do not fulfill the requirements of novelty and non-obviousness.

Intellectual property aspects of access to genetic resource and equitable benefits sharing arrangements that govern the use of genetic resources.

Disclosure requirements in patent applications that relation to genetic resources and associated TK used in a claimed invention (www.wipo. int)

Similarly, WIPO also provides a forum for international policy debate and development of legal mechanisms and practical tools concerning the protection of TK and traditional cultural expression (folklore) against misappropriation and misuse, and the intellectual property aspects of ABS in genetic resources (www.wipo.int)

Source: SAWTEE. 2006. Access, Benefit sharing and prior Informed consent legal mechanisms in south Asia. Research Report vii+50. Katmandu: South Asia watches on Trade, economic and environment (SAWTEE)

Bibliography

Adhikari Ratnakar, et. al (2000), *Seed of Monopoly, Impact of TRIPS Agreement on Nepal,* Pro-Public and Action Aid Nepal, Kathmandu.

Adhikari, Kamalesh (2004), *IPRS and Alternative Models to Protect Farmers' Rights.* A Policy Brief, Kathmandu, SAWIEE, Modern Printing Press.

Adhikari, Ratnalar and Kamalesh Adhikari (2005), *Farmers' Rights in the Context of Globalization and WTO.* Article Paper, Modern Printing Press, Katmandu.

Baru, Dillip Kumar (1994), *New Intellectual Property Regime, GATT A Agreement or Dunkel Draft Tr5eaty its Impact on Agriculture, Industry, TRIPS and TRIMS and Drug Industry, New* Delhi, Mittal Publication.

Chalise, Bhola Nath: *National Study on Intellectual Property for Small and Medium-Sized Enterprises Nepal,* Kathmandu, 2005.

Das, G.L. (2003) "*World Trade Organization: Some Emerging Issues in Nepalese Context"* in Prashikchan, Nepal Rastra Bank, bankers Training Center Kathmandu.

Dutta, Mita (2005), "Priorities for Farmers' Rights in India, Farmers' Rights, in the Context of Globalization and WTO. Newsletter, SAWTEE, Kathmandu.

Gauchan, Devendra (2002), National Plant Genetic Resources Policy for Food and Agriculture: A Case Study of Nepal, NARC, Kathmandu Nepal.

Ghimire, Dr. Hiramani, ed. Al (2004), *Nepal in the WTO Livelihood and Food Security Perspective*, Kathmandu SAWTEE and AAN.

Guru, Majula M.B. Raw (2003), *WTO and International Trade*, New Delhi, Vikas Publishing House Pvt. Ltd.

International Trade Centre UNCTAD/WTO (ITC) Common Wealth Secretarial (CS), *Business Guide to the World Trading System*, Second Edition Geneva, Chapter 20 pp 237.

Karki, Ramesh Bikram (2001), *Review of The Status of Nepalese Membership Procedure To the WTO, WTO Globalization and Nepal*, Kathmandu NEFAS Publiction, Modern Printing Press.

Khor, Martin (1990), *Intellectual Property (TRIPS) Tightening, TNC Monopoly on Technology, in the Uruguay Round and Third World Sovereignty,* Third World Network, Penang, Mday.

Krumm, Kathic and Homi Kharas (2004) *East Asia Integrates A Trade Policy Agenda for Shared Growth,* World Band and Oxford University Press.

Leaffer, Marshall A, *Protecting United States Intellectual Property Abroad: Toward a New Multilateralism,* 76. IOWAL. REV. 273, 292-306 (1991).

Luthria, Manjula, et. al (2004), *Intellectual Property Rights Region,* from The Book of Note No. 18.

Mascus, Keith (2002), *Benefiting From Intellectual Property Protection*, Development, Trade and The WTO.The World Bank, Wshington D.C

Nepal Rastrya Bank (2003), *WTO and Nepal,* Research Department, Kathmandu, Nepal.

Penna, Frank J. ed. Al (2002), *Development Trade and WTO,* the World Bank Publication.

Rapp, T Richard and Richard P. Rozek, Benefits and Costs of Intellectual Property Protection in Developing Countries, 24 J. world Trade 75, 77-90. (1990)

Reichman, *GATT, Connection, Supra Note 8,* at 747, 795-96.

Reiohmann, J.H, (1999) *TRIPS, the Uruguay Round and Third World Interest* India, BR Publishing Corporation.

Rozek, P. Richard, *Protection of Intellectual Property Through Licensing:* Efficiency Consideration, 22 J. World Trade 27, 28-30 (1988).

Sharma, Puspa (2005), "*Options to protect farmers' rights in Nepal*.", Farmers' Rights in the Context of Globalization and WTO. Newsletter, SAWTEE, Kathmandu.

Shrestha Ananda P. (2001), *WTO Colobalization and Nepal,* Kathmandu: NEFAS Publication, Modern Printing Prers.

Simon, Emery, *U.S. Trade Policy and Intellectual Property Rights,* 50 ALBWYL. Rev. 501 (1986).

Singer, Sir Hans, et. al (1999),*TRIPS, the Uruguay Round and Third World Interest* India, BR publishing Corporation.

Subramanian, Arvind (2002), *Development, Trade Related Aspects of Intellectual Property Rights, GATT Agreement or Dunkel Draft Treaty its Impact in Agriculture, Industry, TRIPS and TRIMS and Doug Industry,* New Delhi Mittal Publication.

Transnational Development and Management Division, United Nations Department of Economic and Social Development, International

Property Rights, and Foreign Direct investment, UN, DOC St/CTC/SERA/24, UN Sales No. E. 93.II.A.10 (1993).

UNCTAD, *A Positive Agenda for Developing Counties Issues for Future Negotiation*, United Nation and Geneva (2000).

Upadhaya, Madhusudan P. (2003), *Protecting Farmers' Rights for Sustainable Agriculture Development in Nepal*, Farmers' Rights to Livelihood in the Hindu, Kush Himalayas, SAWTEE, Kathmandu.

Upadhyay, Madhusudan P. (2003), *Protecting Farmers' Rights for Sustainable Agriculture Development in Nepal*, Farmers' Rights to Livelihood in the Hindu-Kush Himalayan, SAWTEE. Kathmandu, Nepal.

Watel, Jayshree (2001), *Intellectual property Right in the WTO and Developing Countries*, New Delhi, Oxford University press.

World Trade Organization (WTO), *Information and Media Relation Division* WTO 1995, Switzerland.

World Trade Organization, *Annual Report2*

Journals

- WIPO magazine
- Industrial property Journals of different years.
- Industrial statistics of different years

Websites

- www.moics.gov.np
- www.wto.org.
- www.southcentre.org.
- www.ictsd.org