Power, Knowledge And Globalization: A Case Study of TRIPs

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Submitted by
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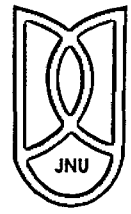

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CERTIFICATE

It is certified that the dissertation entitled "**POWER, KNOWLEDGE AND GLOBALIZATION: A CASE STUDY OF TRIPs**" submitted by **B. Rajeshwari** is in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of this University. This dissertation has not been submitted for the award of any other degree in this University or any other University and is her own work.

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Introduction

This study is an attempt to understand the assertion of power and knowledge in contemporary globalization by taking Agreement on Trade Related Aspects Intellectual Property Rights (TRIPs) as the case study. TRIPs agreement deals with one of the recent concerns of globalization, which is to define the norms of intellectual property rights.

Intellectual property right has emerged in the last decade as a central issue on national and international agenda. After the completion of Uruguay Round negotiations and ratification of TRIPs agreement, there is a growing awareness and concern on the issues emerging as a result of the implementation of TRIPs. The problems related to pharmaceutical industries, agricultural sector or those of traditional communities within developing countries have raised certain vital questions about intellectual property rights even at the conceptual level.

The study analyses TRIPs as part of globalization process and argues that power politics in the contemporary period is different from the earlier dynamics of power and its exercise is based on the acquisition of knowledge and exploitation of it. It is interesting to analyze the TRIPs agreement to understand power politics in the present era of globalization and how ownership of creative knowledge is used as an important tool to exercise power over the weaker countries at one level and the subjugated forms of knowledge at another level. This study examines politics and diplomacy of intellectual property rights between developed and developing

countries since last decade. The differences on the issue of intellectual property rights between the developing and developed countries reflect two competing visions on the ownership of creative knowledge and coercive implementation of one view over the other. The TRIPs agreement and its implementation have highlighted certain enduring concerns about economic development.

An analysis of the agreement also answers certain vital questions as far as power politics at the international level is concerned. How do rich countries use their power and wealth to restrict the patterns of development in developing countries? Are the provisions of TRIPs agreement tilted in favour of developed countries? How would TRIPs agreement be beneficial for developing societies, which perceive creative knowledge differently from the developed countries? What are the concerns of traditional communities with the implementation of TRIPs agreement? Is the exercise of power through multilateral agreements like TRIPs part of a larger process of making the benefits of globalization flow towards developed countries?

The study is divided into four chapters and ends with a conclusion based on the arguments made in the previous four chapters. The first chapter gives an overall understanding of globalization and differentiates between the present phase of globalization with the earlier attempts to integrate the world. The chapter in the end brings in the issue of intellectual property rights within the framework of globalization. The second chapter is a conceptual analysis of intellectual property rights and argues that as a concept intellectual property rights is intrinsically connected to the evolution of capitalism and therefore is more suited for the

economies of developed countries than the developing countries. The third chapter deals extensively with the TRIPs negotiations and the dynamics of power politics that came to play a vital role at the negotiating table. The fourth chapter is on the implication of TRIPs agreement on traditional communities of developing countries and the contradictions that emerge between the Convention on Biodiversity as well as TRIPs, when it comes to the rights of these communities. The final chapter summarizes the conclusions arrived from each of the chapters and tries to suggest certain policies that developing countries could adopt to reduce the negative impact of TRIPs on their economy as well as their knowledge systems and biodiversity.

CHAPTER I

Understanding Globalization

Globalization is a product of the "Second Great Age of Capitalism", a phrase used for the first time by David D. Hale.[1] Since the emergence of international economy in the seventeenth and eighteenth century, the world economic and political system is faced by its most profound transformation. Globalization has come to be understood as changing rapid pace of economic integration like homogenization of prices, products, wages, rates of interest and profits along with a combination of new set of political and social values. There is probably no disagreement over the claim that globalization is driven by capitalism. But, there is significant debate among various scholars and analysts on the influence that globalization has had on various activities governing the world. The need to understand globalization is because of the manner in which the process and results of globalization are changing the way we live our lives on a personal basis and they are changing the institutions which are collectively used to give form and predictability to the economic, social, and political relationships.[2] The impact of globalization has not been similar across the globe. Since Globalization has come to be linked with capitalism the larger question that has emerged is concerning the difference between the current stage of integration with earlier attempts of the capitalistic system to integrate.

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[1] Robert Gilpin, *The Challenge of Global Capitalism* (Princeton: Princeton University Press, 2002), p.15.

[2] Richard Langhorne, *The Coming of Globalization – Its Evolution and Contemporary Consequences* (New York: Palgrave, 2001), p.1.

In order to understand the diverse views on globalization it is important to mention the circumstances which resulted in the present phase of globalization and how it is different from the earlier attempts of integration. The most important transitional developments took place in the 20th century in the immediate aftermath of the Second World War. Following the Second World War emerged a prosperous economic and political system constructed by the institutional framework of the Bretton Woods, Marshall Aid, NATO, and European integration. The major economic powers agreed that trade and other economic activities should be regulated by binding rules and that states were not to interfere in determining international economic outcomes. Nevertheless, the state played a very important role during this phase and national governments held the reins of economic policy. The individual states were permitted to pursue economic stabilization and social welfare policies and Bretton Woods system underlined individual nations freedom to pursue economic growth and full employment. The state followed a pattern of social welfare schemes and the economic enterprises were not given a free hand in deciding the rules of production and distribution. This phase of international economic system in effect provided for a compromise between the rigid standards of the late 19th century under which the governments had little ability to manage their own economies and the monetary anarchy of the 1930s, when governments had too much license to engage in competitions and other destructive practices. The governing institutions of the Bretton Woods system were the International Monetary Fund (IMF) to maintain the world monetary reserves and the General agreement on trade and Tariffs (GATT) to look into the international trade practices.

The Bretton Woods system had certain inherent weaknesses, which eventually perpetuated in its decline in 1973. For example, agriculture which was a significant part of the international trade and economy had been excluded from the GATT rules. Similarly, the Bretton Woods system soon seemed inadequate and inefficient to handle the emerging concerns of international economy like trade in services, Foreign Direct Investment, and intellectual property rights. The increasing importance of the Multinational Corporations and foreign direct investment profoundly transformed the international economy bringing trade and investment more tightly linked.

The end of Cold War and the decreased need for close cooperation among the United States, Western Europe, and Japan significantly weakened the political bonds that held the international economy together.[3] As a consequence the Bretton Woods system which was largely based on rule-based international economic system, collapsed in 1973 distinctly turning to denote the beginning of a period of growing financial volatility, slower rates of economic growth, higher rates of inflation and growing unemployment. The post war era of rapid economic growth ended and a decade long economic turmoil began. After 1973 for another twenty years most of the countries faced sluggish economic growth rates. The other major event that contributed to the end of the postwar era of rapid economic growth was the 1973 oil crisis. In response to the Yom Kippur War, the Arab members of the Organization of Petroleum Exporting Countries (OPEC) initiated an oil boycott

[3] Robert Gilpin, *The Challenge of Global Capitalism*, 2002, p. 9.

and thus forced a significant increase in the world price of oil. The oil crisis resulted in recessionary and inflationary pressures. [4]

In order to overcome the problems of 1970's and 1980's, the western policy-makers started promoting policies congenial to holders of money and capital. The process can be traced to the policies of United States and the transformation of agencies such as the OECD, World Bank and WTO. Thus new trading regimes were institutionalized. There was a substantial revamping of the IMF to meet the requirements of the current demands of the international economic system. In the 1980s Ronald Reagan and Margaret Thatcher preached the free market ideology.[5] These were the preliminary steps to the present phase of globalization. These measures which primarily meant deregulation of market, withdrawal of state, rapid communication mechanisms, were transported to developing countries through the institutionalized trading regimes like the IMF and GATT. The Washington Consensus, an understanding between the IMF, World Bank and U.S. Treasury advocating the "Right Policies" for the developing countries was also based on fiscal austerity, privatization, and market liberalization. In the years that followed there was a striking rise of private flows through Foreign Direct Investments (FDI) to the developing countries.[6] The failure or the problems faced by social democratic countries all over the world and fall of the Soviet Russia eventually led to the deregulation of market and the importance of new-liberal policies, which aided in the coming of globalization. A series of political decisions, influenced by the pressure imposed by the US, the World Bank, the

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[5] Joseph E. Stiglitz, *Globalization and its Discontents* (New Delhi: Penguin Books, 2002), p.13.
[6] John Eatwell and Lance Taylor (ed.), *International Capital Markets: Systems in Transition* (New Delhi: Oxford University Press, 2003), p.43.

IMF and the new offshore financial centers, made the developing countries liberalize their financial markets since 1970s.[7]

Thus globalization is a result of a combination of economic and political changes both deliberate and accidental that occurred in the 1970s and was carried on more rapidly in the 1980s. It is difficult to point out just one particular aspect of the changes in the world economy which contributed to the emergence of globalization. In other words, globalization is the outcome of a combination of factors and different scholars have given importance to various causes in the emergence of the current phase of global integration.

Scholars like Richard Langhorne have attributed the advancement in technology to have resulted in globalization. According to him the physical barriers to world wide communication have broken down and emergence of information technology has led to global economic patterns.[8] But according to Aseem Prakash and Jeffery A. Hart apart from technological advancements, markets and market supporting governance are important in fostering and dissemination of technological innovations and accelerating globalization processes.[9] Another set of arguments focus on the domestic, political, and economic actors as key driving forces behind such policy changes. According to these explanations the main actors are domestic with substantial export interests, multinational enterprises, and financial traders. The state enterprises have become a major factor in accelerating transnational

[7] Heikki Patomaki, *Democratising Globalization: The leverage of the Toxin Tax* (London: Zed Books, 2001), p.1.
[8] Richard Langhorne, *The Coming of Globalization – Its Evolution and Contemporary Consequences*, 2001, p.2.
[9] Aseem Prakash and Jeffery A. Hart, *Globalization and Governance* (London: Routledge, 1999), p.5.

capital flows in recent years, often through mergers and acquisitions. FDI, as a proportion of world gross product rose from 7.8 % in 1967 to 14 % in 1988 and to 21.4 % in 1996. Overall world FDI flows more than tripled between 1988 and 1998, from US$ 192 billion to US$ 610 billion, and the share of FDI to GDP is generally rising in both developed and developing countries.[10] The value of cross border mergers and acquisitions rose dramatically from $ 25 billion in 1980 to $350 billion in 1996.[11] This explains a tremendous acceleration of the capital flows, a major share of which is occurring in the developed countries. Given this acceleration in the international capital flows it is not surprising that many scholars attribute this as the major factor for the emergence of globalization.

Important cause for the pace and extent of globalization processes is the increasing legitimacy and spread of market based systems for allocation and exchange both within and between countries. All of these above mentioned causes have been important in accentuating the current phase of globalization. However two important institutional shifts according to Beinart have been the key to the process of globalization. Establishment of liberal trading and monetary regimes in the late 1940s and abolition of control over movement of foreign capital in the 1970s attributed in the arrival of contemporary globalization. People like Beivart see global integration since World War II as stemming from politics than from technology. Sameer Amin argues that the multi-speed system had been there throughout the history of capitalism, though it was promoted for exceptional

[10] World Bank Research Paper on Globalization and its impact on poverty, inequality and environment, http://www/.worldbank.org/economicpolicy/globalization/documents/AssessingGlobalizationP1.pdf

[11] Richard Langhorne, *The Coming of Globalization – Its Evolution and Contemporary Consequences*, 2001, p.19.

reasons during the post war period when social relations had imposed systematic government interventions.[12]

The coming of giant corporations, an international stock market, and transnational flows of capital, goods services, technology, and information is certainly not a new development and thus is not specific to this particular era. Therefore the question is what is specific to this stage of globalization? Robert Gilpin, in his book "*The Challenge of Global Capitalism*" argues that features of the present phase of globalization, like economic integration, limited nature of state participation, labour globalization, are not new.[13] In fact according to Paul Krugman the world economy in the 1990s was less integrated than in was prior to the World War I. Considering the size of national and international economies, trade, investment, and financial flows were greater in the late 1800s than at the end of 1990s. During the 20th century there certainly has been a great increase in the speed and absolute magnitude of economic flows across national borders; yet the economic impact of globalization for these theorists has been largely confined to the Triad (the United States, Western Europe, and Japan) and to the emerging markets of South Asia. Robert Gilpin primarily wants to suggest that due to the limited nature of globalization, it is essential to be cautious before attributing all the negative or positive adjectives to the phenomenon of globalization. Some of the critics of globalization have pointed out that the newness of the "information revolution" is impressive but similar revolutionary inventions like the emergence

[12] Samir Amin, "For a Progressive Democratic New World Order", in Francis Adams, Satya Dev Gupta and Kidane Mengisteab (ed.), *Globalization and the Dilemmas of the State in the South*, (London: MacMillan Press, 1999), p.1.
[13] Robert Gilpin, *The Challenge of Global Capitalism*, 2002, p.15.

of railroads and the telegraph, the automobile, the radio, and the telephone brought about significant integration in the late 19th century. In the year 1913 FDI grew so rapidly that it amounted to nine percent of world output, a proportion which according many analysts of globalization has not been surpassed in the current phase of globalization.[14]

But, arguments like these which do not see vital difference between the present and earlier stages of globalization, believing that globalization has only impacted upon a few countries and the rest have been excluded need to be contested. There is ample evidence to suggest that the transformation within capitalism in the late 1800s is similar to the ones that occurred in 1990s. Similar to the present phase, in the late 1800s as well there were almost no restrictions on the movement of goods, capital, and labor across national boundaries. There was a significant technological development with the invention of steam engine, the railway, and the telegraph. Thus the earlier phase also witnessed a communication revolution due to these inventions as is being experienced today with the information technology revolution. The new forms of industrial organizations which emerged in the 1800s played a significant role in shaping the economy of that age and similar functions though in a much more advanced form are performed in the current phase by the Multinational Corporations.[15]

[14] Giovanni Arrighi, "Globalization, state sovereignty, and the "endless" accumulation of capital", in David A. Smith, Dorothy J. Solinger and Steven C. Topik (ed.), *States and Sovereignty in the Global Economy* (London: Routledge, 1999), p.54.

[15] Deepak Nayyar, "Globalization: What does it mean for Development?", in Bibek Debroy, (ed.), *Challenges of Globalization* (New Delhi: Konark Publishers, 1998), p.24 and 25.

Yet the present capitalist programme of global integration needs to be distinguished from the earlier such attempts on the basis of a) the magnitude and extent of the integration and b) the cause, effect and response to the current developments. Globalization in its current form has had an effect on every country of the world whether positively or negatively. Though globalization does have a lot of features which are similar to the earlier stages of capitalism where market was self-regulatory and state intervention was minimal, yet it cannot be dismissed or underplayed as being another form of imperialism or mercantilism. According to Eric Helleiner[16] and Saskia Sassen[17], the most significant expansion of the last two decades making the present phase of globalization more intense and wide has been the emergence of world financial markets. Since 1980s says Saskia Sassen the total value of financial assets has increased two and half times faster than aggregate GDP of all rich industrial economies. There is a basic assumption that the current phase of global economy is an increasing "time-space compression" in which the sheer velocity of exchanges rapidly multiplies.[18] The emergence of information technology and the internet revolution has reduced the space and time among the people across the globe. Moreover, the access to cyberspace from anywhere on the globe allows personal and instantaneous participation in the global stock market, something that could not have been imagined in the previous stages of integration.

[16] Eric Helleiner, "Sovereignty, territorial and the globalization of finance", in David A. Smith, Dorothy J. Solinger and Steven C. Topik (ed.), *States and Sovereignty in the Global Economy*, pp.142.
[17] Saskia Sassen, "Embedding the global in the national: Implications for the role of the state," in David A. Smith, Dorothy J. Solinger and Steven C. Topik (ed.), *States and Sovereignty in the Global Economy*, pp.163.
[18] David A. Smith, Dorothy J. Solinger and Steven C. Topic (ed.), *States and Sovereignty in the Global Economy*, p.4

Though global exchanges predate the capitalist era to the advocates of globalization, it is only now that the world's needs and desires have been irrevocably homogenized and it is technology which drives consumers relentlessly towards the same common goals. According to Arrighi the present phase of 'financialization' is one where there is a clear preference given by private and institutional investors to liquid rather than fixed capital.[19] Moreover, this system is non-territorial in character and all states are constrained to manage their finances according to global criteria. The world economy of the 1920s might have been integrated but at the same time, it remained territorial and separate, and the number of people involved in global economic transactions was also very small.

The large corporations which emerged as a result of the earlier stages of capitalism were a part of the state and were national firms whose activity had extended beyond the frontiers of their own country of origin. In spite of their extended influence they needed the support of their government and did not enjoy the discretions enjoyed by the multinationals of today. But in the current scenario the multinational firms have become powerful enough to develop their own strategies of expansion outside the assumptions of government policies.[20] In many cases nation states have to compete for the favour of global corporations rather than the other way around.

[19] Giovanni Arrighi, "Globalization, state sovereignty, and the "endless" accumulation of capital", in David A. Smith, Dorothy J. Solinger and Steven C. Topik (ed.), *States and Sovereignty in the Global Economy*, 1999, p.55.

[20] Samir Amin, "For a Progressive Democratic New World Order", in Francis Adams, Satya Dev Gupta and Kidane Mengisteab (ed.), *Globalization and the Dilemmas of the State in the South*, 1999, p.21-22.

Even while promoting private industries, it is the strategic knowledge industries which have been heavily encouraged by the advanced industrial states. The strategic alliance between capitalist states and their Transnational Corporations is not new, but the shift to knowledge industries and intellectual property rights is characteristic of the new phenomenon of global capitalism and informatics imperialism. The process of globalization has affected even those who are not directly linked with the economic changes that have gripped the world. For example, the controversy over the right to public health[21] after the inaccessibility of drugs by AIDS victims in African countries as a result of globalization of patent laws had vast reaching consequences. Moreover strict copyright laws did not allow researchers in the African continent to have access to the preliminary material on the drugs in order to further their research. The information revolution which is a result of information technology and communication has integrated the world in a manner which was unimaginable in the earlier attempts of global integration.

Though the present stage of globalization is a part of the capitalist project, its scope and impact has been immense and wide. It has not only affected all aspects of human life but has brought in new agencies and has resulted in a rapid flow of communication. The elites in the present phase of globalization have also changed. In addition to state managers, there are new financial and transnational corporate elites combined with the newly empowered multinational institutions

[21] It was in the Doha Conference in November 2001, that the importance attached to implementation and interpretation of the TRIPs Agreement in a manner supportive of public health by promoting both access to existing medicines and research and development into the new medicine has been stressed. See Mohammad Hussain, "World Trade Organization and the Right to Health: An Overview", *Indian Journal of International Law*, Vol. 43, No. 2, April-June 2003, p.299

like IMF, the World Bank, and the World Trade Organization (WTO). These elites constitute what could be called as global ruling class. The international corporate elites and their influence of the global economic system were not witnessed in the earlier attempts to integrate the world. The governing political authorities of the powerful countries were often solely responsible for the economic decisions of the world.

But today the corporate giants, who have a significant stake in the economic activities of the world, are highly influential. For example, the TRIPs agreement governing the intellectual property rights could materialize due to the influential role played by the corporate lobbies in United States, Europe, and Japan.[22]

Under the current phase of globalization the idea of development itself has been redefined as "participation in the world market". The phenomenon of global capitalism has brought with it, universal conditions applicable to all states. For example- during the time of debt management, the IMF assumed a defacto role of banker to the world, determining the conditions by which state could renegotiate their outstanding loans or their debt. These conditions were universally imposed and adopted as states privatized public assets, slashed social budgets, cut wages, elevated national currencies, and promoted exporting. This type of a trend came to be known as global governance which was quite different from the United Nations system.

[22] Ernst-Ulrich Petersmann, "From Negative to Positive Integration in the WTO: The TRIPs Agreement and the WTO Constitution", in Thomas Cottier and Petros C., (ed.) *Intellectual Property-Trade, Competition and Sustainable Development* (New York: Palgrave), p.54.

The knowledge based economies of today have downgraded the importance of 'things' in the global economy. For example, a company skill may be more valuable than auto engines or knives and forks. This trend has mainly developed because the dissemination of all forms of knowledge is more or less immediate. Richard Langhorne suggests that while the globalizing economic tendencies of the early 20th century were taking place within a well established and widely accepted social, economic and political order, today's globalization challenges long-established ideologies and values and there is no clear guide to the future developments.

There is a de-territorialized global stock market created by global communication. The number of individuals involved, particularly as investors has risen sharply and neither the time of the day nor the physical location of an investor matters anymore. Perhaps the most distinct feature of the present phase of globalization is the change in the pattern of power politics. It is true that every international system throughout history has been hierarchical and composed of dominant and subordinate economies. It is quite idealistic to imagine of an egalitarian global economic system or international system. Nevertheless, the present phase of globalization witnesses a shifting pattern in the exercise and manifestation of power at the global level. There has been a significant amount of work done on the dynamics of power relations but they are mainly an attempt to understand the exercise of power by the developed countries on the developing countries.

Power politics and domination have been vital features of capitalism. The trends of imperialism in the early phase of capitalism and the indirect control of the

economies of the developing countries by the developed countries even after their independence have been important aspects of the various stages of capitalism. Even within a capitalist state, there was a strong sense of hierarchy and domination where the capitalists exercised their control over the workers. Though the capitalist-worker relation improved significantly after the coming of welfare state, yet it cannot be denied that the system of capitalism promotes the exercise of power. Since globalization is intrinsically linked to capitalist system, the existence of power politics cannot be ruled out of this system of global capitalism. At the same time there needs to be a distinction in the way in which globalization has shaped the nuances of power relations in the present era. Power is a relational phenomenon and does not exist in isolation. It expresses the intentions and purposes of agencies and institutions, which exercise power. But, at different stages of globalization there have been different agencies and organizations as well as different means through which power is determined. There have been different patterns of stratification at different levels of globalization.[23] It is primarily because of this stratification that the consequences of globalization are unevenly experienced.

The emergence of new systems like the WTO has resulted in the creation of new centers of power. These agencies have initiated global rules for economic transactions and trade relationships, which have been directly or subtly imposed on most of the countries. It can also be argued that IMF and WTO like organizations are primarily influenced by the developed countries and hence a new instrument for maintaining their hegemony.

[23] David Held and Anthony McGrew, David Goldblatt and Jonathan Perraton, (ed.) *Global Transformations: Politics, Economics and Culture* (Cambridge: Polity Press, 1999), p. 20.

The dynamics of power have become complex and are not simply a straightforward relationship between the developed and developing countries. The powerful countries like the United States or influential members of the European Union do not exert power only on the weaker developing countries. In various cases coercion whether direct or indirect has been exercised on many countries with a strong state. For example- the United States used various different methods like unilateral, bilateral, and multilateral means to bring all the countries under the TRIPs agreement. The growing nature of interdependence among countries in this phase of globalization compels even the powerful countries to exercise their authority over other countries based on the significance of the country over which power is exercised. Thus, coercive application of power is not always witnessed but even tacit and subtle means are used to exert power. Whenever such relationships of power emerge, they are not easy and simple to comprehend.

Moreover, as the shift has been towards knowledge industries in the current phase of globalization, the control over these knowledge industries has determined the centers of power. In this regard the access and control over creative knowledge is one form of influencing power. Therefore an intrinsic relationship has developed between knowledge and power in contemporary globalization.

If globalization has meant greater integration, better communication, it has also meant according to many theorists a decline in the authority of the state. Many have argued that the territorial boundaries would slowly become irrelevant. But, to take such extreme stands would be a little presumptuous. The state has lost its

influence over many of the economic decisions with the emergence of global economic norms. Nevertheless, the state has also been an important actor in the liberalization policies in many countries. According to Philip Mc Michael in "*Globalization Myths and Realities*", Globalization process is not simply an external imposition on states from global agencies. State managers often collaborate in the restructuring of state organs under the dictates of the new rules of multilateral agencies to improve the efficiency of economic enterprise under their jurisdiction.[24]

The impact of globalization on states has depended on the type of state and has not been similar for all the states. The state capacity has played a greater role in determining what kind of an influence globalization has had on a particular state. Moreover, globalization may have meant a reduction of state control and not state authority. Perhaps, the need for states is not disappearing, but it is being reconfigured. According to Martin Wolf in "*Will the Nation-State Survive Globalization?*," the states are important as the ability of a society to take advantage of the opportunities offered by international economic integration depends on the quality of public goods, such as property rights, an honest civil service, personal security, the basic education. Moreover state is also important as it defines the identity of an individual which is difficult to compromise even in the age of globalization.[25] The states authority might depend on the manner in which it tackles the forces of globalization and this would vary for different states. Therefore any standard impact of globalization on all states cannot be predicted.

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[24] Philip Mc Michael, "Globalization: Myths and Realities", *Rural Sociology*, Spring 1996, Vol. 61, No.1 p.55.

[25] Martin Wolf, *Globalization: Challenge and Opportunity*, A Council on Foreign Relations Book, (New York: Foreign Affairs, 2002), p.108

Globalization in this phase is also unique from the earlier attempts of integration with respect to its impact on different societies and also in terms of the response which it has received. The consequence of globalization is different for different societies within a state and also among countries, which explains the contrasting views on globalization given by different scholars who study the phenomenon. Third world scholars like Francis Adams, Satyendra Gupta and Kidane Mengisteab Sgull contend that though globalization has affected all countries, yet the degree of change has not been uniform throughout the world. [26] They make a distinction between the industrialized nations of the north and the developing nations of the south. According to them it is largely due to the presence of the transnational corporations which are based in the North that the sovereignty of the states in the South or developing countries is being eroded. In many cases the Multinational Corporations are wealthier, than the countries in which they invest. In the article "*Globalization: Old Wines into New Bottles?*" Ismail Sharif and David Littig say that globalization of the current phase is primarily an instrument in the hands of the western powers to exploit the developing countries.[27] Similarly Akhilesh Chandra in "*Inequality in the Global Village: The future ahead*" [28]brings out the challenges posed by globalization and the stark inequality in the income distribution of the rich and the poor. He contends that the gap between the rich and the poor has widened and has resulted in increasing the level of poverty among the third world countries. Therefore there is a tendency to bring

[26] Francis Adams, Satyendra Gupta and Kidane Mengisteab (ed.) *Globalization and the Dilemmas of the State in the South*, 1999, p.1.
[27] Ismail Sharif and David M. Littig, "Globalization: Old Wines into New Bottle?" *World Affairs*, Vol. 6, No. 2, April-June 2002, p.40. Also see, Ismail Sharif, "Growing Discontent With Globalization", *World Affairs*, Vol. 7, No. 3, July- Sept 2003, p.17.
[28] Akhilesh Chandra Prabhakar, "Inequality in the Global Village: The Future Ahead", *World Affairs*, Vol. 6, No. 2, April-June, 2002, p.71.

in the North-South divide while relating power politics within the realm of globalization.

It cannot be refuted that globalization has indeed been instrumental in and facilitated the exploitation of the third world countries by the developed countries. Joseph Stiglitz in his book *Globalization and its Discontents* says that globalization is not working for many of the poor in the world, a majority of who are a part of the third world countries. He contends that the transition from communism to market economy has been badly managed by the west and the global institutions like the IMF. With the exception of China, Vietnam, and a few Eastern countries, poverty has soared as incomes have plummeted.[29] There has been a conscious effort to marginalize the developing countries.

Even in contending that globalization is a product of capitalism there have been proponents and critics of globalization. The Free Market Perspective on globalization elucidated by people like Lowell Bryan and Diana Farell believe that globalization is releasing pent up economic forces and leading to more efficient use of global wealth and enabling all people to benefit economically.[30] They expect that commercial and other bonds among democratic market oriented societies will be strengthened, thus promoting world place. Therefore for them globalization is leading to an era of unprecedented prosperity as more and more nations participate in the global economy.

[29] Joseph E. Stiglitz, *Globalization and its Discontents*, 2002, p.214.
[30] Robert Gilpin, *The Challenge of Global Capitalism*, 2002, p.296

The populist (nationalist) perspective on the other hand blames globalization for most of the social, economic, and political ills afflicting the industrialized societies. In the United States Ross Rerot and Patrick Buchanan on the political right and organized labour on the political left subscribe to such beliefs. The shrinkage or demise of social welfare schemes is a result of globalization according to the proponents of this view. These critics of globalization in the western countries have supported trade protectionism, regional economic blocs, and limitations on the activities of multinational corporations. The communitarian perspective denounces globalization for foisting a brutal capitalist tyranny, imperialist exploitation, and environmental degradation upon the peoples of the world. Communitarians like populists also believe that globalization is responsible for almost all the world's economic and political ills, including inequality and chronic high unemployment. The Communitarians as a solution to the ill effects of globalization suggest a return to a world of self-sufficient closed communities.

Proponents and opponents of globalization differ considerably in their expectations of the effect of globalization on distribution of wealth and power among the national economies. Proponents argue that globalization would eventually achieve greater equality and convergence of performance among national economies. Integration of the less developed economies (of the South) into the world economy will lead to great increases in their rates of economic growth and levels of productivity. In fact, they assume that the farther behind an economy is, the faster that economy could grow until it catches up with the more advanced countries. Many of the American economists believe that the third world

countries would adopt the American model of a market-oriented economy and that globalization will increase worldwide acceptance of individualism and political democracy. [31]

Populist and communitarians perceptions on globalization present a very different assessment of its consequence. Populists believe that, although the economic and technological flows from the developed to the developing countries may be beneficial to the developing countries, it would be harmful for the developed countries. The convergence process as a result of globalization would greatly undermine the wealth and power of the industrialized countries.

The communitarians would argue that globalization creates a hierarchical international economic and political system composed of the rich developed countries and the exploited, impoverished developing countries. Globalization is leading to a massive concentration of corporate power, which is supported by the World Bank, IMF and the other American-Dominated international organizations.

While analyzing the consequences of globalization it is important to avoid taking extreme positions. Globalization is neither a boon nor can it be abandoned as a curse. The opening up of international trade has helped many countries grow far more quickly than they would otherwise have done. Export led growth was the centerpiece of the industrial policy that enriched much of Asia where millions were benefited because of the increase in standard of living. Globalization has also helped many in the developing countries with better and faster options to

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[31] Robert Gilpin, *The Challenge of Global Capitalism*, 2002. p.299 and 300.

access knowledge which they previously did not have. But nevertheless there is a fast growing movement against globalization and this makes one question the belief that globalization has been beneficial for all. It cannot be refuted that globalization has brought in better opportunities for many in the poorer countries.

But the East Asian economic crisis which took place in 1997 affecting many of the flourishing economies raised some potential questions against globalization. The blame for the East Asian crisis is often made on the governments of Malaysia, Indonesia, Korea, and the Philippines who were not able to manage their fast growing economies. The IMF was equally responsible in exacerbating the situation in East Asia as it imposed its policies on these countries.[32] The purpose of IMF was to avert and deal with crises of this kind, the fact that it failed in so many ways led to a major rethinking of its role. The IMF was not only responsible in worsening the situation in East Asia but its policies were partially responsible for the onset of the crisis. Excessive rapid financial and capital market liberalization was probably the single most important cause of the crisis, though mistaken policies on the part of the countries themselves played a role as well.[33]

There are several instances when the IMF and the World Bank have forced their policies of free-market and rapid liberalization in many of the African and other developing countries where the conditions were not conducive for the working Adam Smith's of invisible hand theory.[34] The IMF forced one African country to abandon its uniform pricing before an adequate road system was in place. The

[32] Joseph E. Stiglitz, *Globalization and its Discontents*, 2002, pp.98-99. Also see Heikki Patomaki, *Democratising Globalization: The leverage of the Toxin* Tax, 2001, p.12

[34] Adam Smith in *Wealth of Nations* says that the state should be like an invisible hand without interfering in the economic activities which would be decided by the market.

price received by those in more isolated places was suddenly lowered markedly, as they had to bear the costs of transportation. As a result, incomes in some of the poorest regions in the country plummeted, and it was followed by wide spread hardships.[35] IMF and World Bank schemes may have had some slight benefits in terms of increased efficiency, but these need to be weighed against the social costs.

The interplay of power politics can be witnessed in the World Trade Organization and its policies, which are often determined by powerful countries and the influential groups within these countries. Though, developing countries are a part of these policies, they do not play a decisive role in planning and shaping of these policies. The case of Trade Related Aspects of Intellectual Property Rights exposes the way power is exercised at the international level in the contemporary phase of globalization. TRIPs agreement is an attempt to globalize intellectual property rights laws and has great ramifications as far as control over knowledge is concerned. The negotiations which resulted in TRIPs agreement revealed the asymmetrical power relations between developing and developed countries leading to a better bargain for developed countries primarily because they had an advantageous position even before entering into the negotiations. Implementation of TRIPs has brought new concerns as far as intellectual property rights are concerned and has once again demonstrated that the use of manipulative and coercive mechanisms of power though tilted the benefits of TRIPs towards the developed countries, yet the problems that have emerged after its implementation particularly in developing countries cannot be ignored.

[35] Joseph E. Stiglitz, *Globalization and its Discontents*, 2002, p.75-76.

Therefore if globalization has meant an increase in inequality and has not been beneficial for all then it's primarily because globalization has been mismanaged by powerful countries. The question remains as to why the mismanagement happened? This is again a part of the power politics where the stronger countries have successfully tried to distribute the benefits of globalization among themselves. This is not to suggest that the developing countries have not benefited at all but these benefits have been always under the restrictive eyes of the stronger economies. The developing countries have been allowed to get these benefits to the extent that they don't pose a threat to the developed economies. Globalization has an oppressive characteristic attached to it and it is mainly because of this that it should be denounced. The phenomenon of globalization has been manipulated by certain powerful countries with the aid from international institutions to benefit them in ways that have often hampered the growth of the poorer countries. The mismanagement of globalization by the international financial organizations along with the state's inability in many of the developing countries to provide conditions for the success of liberalized policies have made a large number of developing countries losers in their quest to globalize. At the end of the decade of the 1990s, more than eighty countries had lower per capita incomes than they had ten years earlier.

Though globalization has created a lot of uncertainties and has been accused of being responsible for the market failures, environmental degradation, terrorism, increase in inter-state rivalries and many other ills, yet it cannot be denied that it has brought in a high degree of interdependence among the nations. It is

impossible in today's world to ignore the phenomenon of globalization and its scope. As discussed earlier, globalization has most importantly changed the power relations in international politics. The wide range of responses to globalization is based on the different impact of this phenomenon on various nation-states. In order to understand why globalization has resulted in making few as winners and others as losers it is necessary to take one of the products of globalization and study its impact on various countries. The TRIPs agreement which is one of the products of contemporary globalization serves the purpose of understanding the power equations that have emerged at international level as well as between knowledge systems and why the agreement when implemented has not brought the desired gains for all the countries and knowledge systems.

CHAPTER II

The Concept Of Intellectual Property Rights

Modern concept of intellectual property rights in the form of patents, copyrights, trademarks, industrial designs and trade secrets, which are acknowledged and recognized by most countries of the world stemmed from a certain understanding of creative knowledge where knowledge is perceived as an individual possession. Intellectual property right based on the idea that the individual is the primary actor in all kinds of activities came about with the evolution of capitalism in the 18th century. The chapter is an attempt to contend that intellectual property right in its current form is a capitalist inception; therefore any understanding of recent debates involving it would require a clear perception of the manner in which it came about. It has acquired a lot of relevance in the context of the Uruguay round of multilateral trade negotiations. This chapter would analyze and bring out the current problems related to intellectual property rights and would place them within TRIPs in a broader framework of how creative knowledge has become instrumental in manifestation of power.

A Short History of Intellectual Property Rights

Intellectual property right is most often defined as an object that is the creation of the human mind.[36] The creation could be a work of art, painting, literary text or it could be a scientific invention. Needless to say, that every creation has a creator, but what kind of claim a creator wants over his creation has varied over time. But intellectual property rights as understood today are different from the way creative

knowledge was professed in the ancient times. Certain ways of associating the individuals with their creations existed in the ancient Greek period. The ceramic artists in Greece and Rome used to engrave their name or mark on the product created by them.[37] This mark came to be associated with Greek ceramic work, which in a way was recognition for the artists. But the idea that creative work is the property of an individual and is essential for economic enhancement is a product of capitalism. In 961 B.C intellectual endeavours and skills expressed in literary and artistic works were recognized, protected and awarded. For example in ancient Israel material rewards were given for creative work. King Soloman who reigned from 961 B.C to 921 B.C requested woodcarvers from the King of Tyre for the construction of a temple after acknowledging their superior skill in the art of carving. Soloman gave the woodcarvers 20 thousand cors of wheat and 20 cors of pressed oil each year till the temple was completed. There was no question of imitating a piece of art as creative ability was attributed to god who inspired these artists in the creation of a product. In this kind of an understanding of "authorship" like that of ancient Israel, the individual was recognized as the source of created work. The idea of the Sidonians "owning" the woodcarvings would have been unthinkable during the time of Soloman.[38] Therefore irrespective of the rewards given for creative work, the creation was not the product of the individual alone as the latter had no claim over it. Moreover, the individual only had authorship claims over his creation and could not expect a royalty for others

[37] P.M, Bakshi, *WIPO-Asian Regional Colloquim on the Judiciary and Intellectual Property system*, New Delhi, September 9 to 11, 1992, p.46.

[38] Ruth L. Gana, "Has Creativity Died in the Third World? Some Implications of the Internationalization of Intellectual Property", *Denver Journal of International Law and Policy*, Vol. 24, Fall 1995, p.129.

using the creation. Therefore no ownership claims could be made by the creator of the creation.

Apart from recognition and "authorship" claims, exclusive rights were recognized from a very early time. There are instances where communities and individuals within them claim for certain kind of cultural expressions like songs, dances, and formulas. For example, "Intangible property" which includes songs, dances, and formulas were generally the subject matter of exclusivity and protection in Native American groups.[39] All these may appear as "property" of the community, but that would be a misnomer. They are more of an expression of culture and religion of a particular community as no individual or group has claims of asserting exclusive rights over these. They were seen as property in the sense that knowledge about these songs and dances were in a way licenses to be included in the ceremonies and the right to perform a particular dance. Even protection of these skills, for example, the knowledge of herbal medicines, was developed through a process of time and training which was guarded by the institution of the native doctors of a particular tribe.

The first exclusive right at an individual basis was given as early as 500 B.C for manufacturing an exclusive dish in Syrabis (a Greek colony) to a cook and a confectioner who invented the dish. This right was given for a year.[40] The system of "authorship" claims over one's creative work or exclusive rights to a creation did exist in the ancient period, yet intellectual property rights as understood today

[39] Ibid.
[40] A.K Kaul, and V.K.Ahuja (ed.), *Intellectual Property Rights: In prospect and Retrospect* (New Delhi: Faculty of Law, 2001), p.23.

is an outcome of capitalism and comes with the idea of individualism. Many writers would trace the evolution of intellectual property rights, the way it is understood today, back to the monopolistic grants made in England and other parts of Europe in the 14th century where there was a struggle going on to protect individual creation while maintaining free competition. In the 14th century, in England, small industries had started coming up as a result of new technological innovations during the renaissance period and they were set up by artisans and craftsmen.[41] Due to the increase in trade activities as a result of discovery of new sea routes, the artisans and craftsmen were inspired to open new industries in London and other parts of Europe which were the trading centers. It was in the 14th and 15th century that the granting of monopoly emerged as one of the minor forms of state patronage. The King of England started rewarding these artisans and craftsmen with trading monopolies as they were seen as potential creditors. These monopolies were granted by letter patents which had the Crowns authorization.[42] Letter Patents are official documents by which certain rights, privileges, ranks, or titles are conferred. Among the better known of such "open letters" are patents of appointment (of officers, military, judicial, colonial), patents of nobility, patents of precedence, patents of land conveyance, patents of monopoly, patents of invention.[43] Such letters were used by medieval monarchs to confer rights and privileges. With a royal seal, the letters served as proof of the rights, for all to see. The word patent itself comes from the Latin 'litterae patentes', meaning an open letter.

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[41] W.R, Cornish, *Intellectual Property: Patents, Copyrights, Trademarks and other allied rights* (Third Edition) (London: Universal Law Publishing Company Private Limited, 1996), p.80.
[42] Ibid.
[43] Fritz Machlup, "An Economic Review of the Patent", in Frederick Abbott, Thomas Cottier and Francis Gurry (ed.), *The International Intellectual Property System: Commentary and Materials* (Part One) (The Hague: Kluwer Law International, 1999), p.224

The first recorded patent of invention was granted to John of Utynam. In 1449, he was awarded a 20-year monopoly for a glass-making process previously unknown in England (subsequently, he supplied glass for the windows of Eton College Chapel, UK). In return for this monopoly, John of Utynam was required to teach his process to native Englishmen.[44] Some of the exclusive privileges in the form of "letter Patents" were on inventions while others were on skilled crafts imported from abroad. Some privileges were for a limited period while others were forever. For example: The canton Bern in Switzerland granted patent in 1577 to inventor Zobell a "permanent exclusive privilege."

These patents were nevertheless not impartial and demonstrated the arbitrary character of the Crown. Many of the privileges did not serve to reward inventors and protect innovators and neither did they help in the development of industry in general, but were granted to favourites of the court or to the supporters of the royal office. The granting of patents or any intellectual property right even today comes into conflict with the free flow of goods within a capitalist system. The moment an intellectual property right is granted; to a certain extent it encourages monopoly over that product for at least a short period of time. This conflict was also witnessed in England during that time and more opposition was made to the grant of patents by the Crown because it was arbitrary. Moreover, due to the growing importance of trade it was realized that the system was a hindrance to the free flow of goods and services both inside and outside England. This type of monopoly patent became very numerable in England after 1560, and the abuses

[44] *History of Intellectual Property Rights*, available at http://thomsonderwent.com/patinf/patentfaqs/history/

led to increasing public discontent. Monopolies, in general, fell into hard times due to the abuses of the Tudor Kings in England.[45] Therefore the Parliament which was now gaining more importance in England enacted the Statute of Monopolies in England in 1624 and the exercises of royal prerogatives of granting monopolies was declared as void.[46] The Crown only had the authority to grant patents to the "first and true inventor" of a new manufacture. The Statute of Monopolies had a lot of features which are still the ground rules for granting patents.

From around 1770-1870, England experienced industrial revolution characterized by rapid economic growth and technological advancement that was to make the country the world's leading economic power. With industrialization, came the phase of mass production and trading activities grew in a more vigorous rate. The new economic system led to fundamental changes in the relationship between state and society. In fact, the status of individual within the society and state gained a new importance. It was in the 17th century itself, with the writings of John Locke that the idea of individual claims to ownership of property as a "natural right" came into existence.[47] There was a value being attached to anything produced and the material importance of goods started increasing. The capacity of the capitalist system to generate, produce and re-produce capital also led to the increase in the importance of materialism. The growing importance of

[45] A. Samuel Oddi, "TRIPS-Natural Rights and a "Polite Form of Economic Imperialism", *Vanderbilt Journal of Transnational Law*, Vol. 29, No. 3, May 1996, p.419. Queen Elizabeth I used monopolies for personal and political reasons and by the end of her reign monopolies controlled the market for staples, such as, salt, iron, powder, vinegar, bottles, oil, starch, and paper, with corresponding monopolistic prices.

[46] D.P.S Darmar, in A.K.Kaul and V.K.Ahuja (ed.), *The Law of Intellectual Property: In Prospect and Retrospect* (New Delhi: Faculty of Law, 2001), p.23.

[47] Nikolaus Thuman, *Intellectual Property Rights: National systems and harmonization in Europe* (London: Physica Verlag Publications, 2000), p.5.

individual, ownership rights or claims to property, led to material values being attributed to not only products of human physical labour but also to the creations of human mind. Such a definition of creative expression came at a time when immense importance was being given to liberty, property, private enterprise, accumulation of capital, rapid consumption which are all the attributes of a capitalist liberal society. It is from here that the individual became the main claimant of creative knowledge which took the shape of intellectual property rights and its values those that nurture capitalism.[48]

A combination of market forces and legal foundations already in favour of property rights, individual autonomy, fair and open competition created the need for protection of creations of human mind or intellectual property, while maintaining the above values. This led to the adoption of patent laws and later copyright laws by various industrialized countries where the patentee started to enroll the statements of his invention in the Court of Chancery.[49] A sufficient statement was needed by the patentee as a consideration for monopoly granted to him. The intellectual property right laws were also seen as a means through which the rifts in industrialized societies could be leveled by providing those who were involved in technological inventions with every opportunity for improvement and patents were seen as means to such an end as they provided finances for further inventions.

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[48] Ruth L. Gana, "Has Creativity Died in the Third World? Some Implications of the Internationalization of Intellectual Property", 1995, p.113.

[49] W.R Cornish, *Intellectual Property: Patents, Copyrights, Trademarks and other allied rights* (Third Edition), 1996, p.80.

During the second quarter of 19th century, various groups pressed for strengthening and expansion of the patent system. In Britain, these groups wanted patents to be easily obtainable and effectively enforceable. Similar demands were made in Germany and Switzerland during the same period. These pressures to extend the patent system came in direct conflict with the free-trade movement in the first quarter of the 19th century. Parliamentary Committees were set up to investigate the operation of the patent system during 1851-52, 1862-65 and 1869-72. A patent-reform bill, providing stricter examination of applications, a reduction of the term of protection to seven years and compulsory licensing of all patents, was passed by the House of Lords. But in 1873, the antipatent movement collapsed suddenly, after an impressive propaganda campaign by the groups interested in patent protection. The reasons for antipatent movement's collapse were the great depression, rise of protectionism and the willingness of patent advocates to accept a compromise. The chief reason given by the antipatent advocates was that a patent system was a hindrance to free trade, but this logic did not find much support among the people after the Great Depression as the fallacies of free trade system became blatant. A compromise was reached between the advocates of patents and those who were against it. The concept of compulsory licensing came into existence which gave the inventors the right to have a patent over a product for a given period of time but allowed others to use that product at reasonable compensation to the patent holder during the period of patent.

The need for an International Patent and Copyrights System

In the 19th century, many of the European countries were attracted to introduce a patent system with the hope that it would attract foreign technology. There was a fear among the inventors of technology in other countries that an entry of their goods in the foreign market would result in piracy, if no guarantee is provided to them. This concern induced them to open their systems to foreign applications. The United States, for instance, allowed foreigners to apply for patents much before it offered copyright to foreign authors. The United States also provided patent protection for the longest period of 17 years. While France and Germany awarded patents for 15 years, British patents were for 14 years. Moreover, technological advances during the 19th century made the reproduction of literary works relatively cheap and thus created a demand for the works of authors and artists. There was an increase in commercialization of products which eventually led to the problem of piracy. Due to commercialization of products there was a growing demand for goods in a short time and to overcome this demand pirated goods were flooded into the market, which were cheaper compared to the original products. International piracy emerged as a significant problem which led to the negotiation of two principal international agreements on intellectual property, namely, the Paris convention for the protection of industrial property and the Berne convention for the protection of literary and artistic works.

The origins of Paris convention can be traced to a temporary law enacted in Austria-Hungary in 1873, to encourage the inventor to participate in an international exhibition of inventions to be held in Vienna. The unwillingness of

inventors to participate because of the fear that their inventions would be stolen led to a law which provided special protection for foreign exhibitors and their inventions for the duration of exhibition. In 1873, the same year of the international exhibition, a Congress convened in Vienna with the objective of examining the possibilities for a more effective and useful international system for protecting patented works. In 1878, an international Congress on industrial property was convened as a follow up to the earlier Vienna Congress. A proposal for an international union was prepared and sent to other governments together with an invitation to attend an international conference in 1880. The 1880 conference adopted a draft resolution, parts of which are still incorporated in Paris convention today.[50] On 20 March 1883, a new conference convened in Paris to adopt and sign a final draft of the 1880 Congress, which resulted in the Paris convention for the protection of industrial property, which was signed by eleven nations.[51] The Paris convention tried to meet the earlier issues of equal rights for the foreign inventors within the domestic territory of a country, increase trade relations among nations by removing trade barriers and for this the nationals of each member states were guaranteed same treatment as was to their own nationals. The Paris convention was meant to assure that countries did not discriminate against foreigners while granting patents. But, irrespective of the Paris Convention, the national patent rules of most of these countries were so varied that harmonization of patent laws was not achievable.[52]

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[50] Ruth L. Gana, "Has Creativity Died in the Third World? Some Implications of the Internationalization of Intellectual Property", 1995, p.114.
[51] K R G Nair and Ashok Kumar (ed.), *Intellectual Property Rights* (New Delhi: Allied Publishers, 1994), p.3.
[52] Graham Dutfield, *Intellectual Property Rights and the Life Science Industries* (Washington: Ashgate, 2003), p.50.

Similarly the Berne Convention to protect artistic property (copyright) was signed originally by ten countries in 1886. The convention provided for the protection of literary, musical, photographic, audio-visual, and choreographic works in most of the countries. Both Paris and Berne conventions provided for establishing a separate International Bureau or Secretariat to administer the concerned convention, eventually leading to the formation of World Intellectual Property Organization (WIPO) at Stockholm in 1967.[53] WIPO's primary objective was to promote the protection of intellectual property throughout the world to enhance cooperation among states in relation to intellectual property rights laws.

But both Paris and Berne convention did not create international patent or copyright rights nor did they establish substantial laws in these areas.[54] The Berne convention was simply an attempt to create rights at international level for individual authors as their works moved through channels of commerce from one country to another. On the other hand, the Paris convention arose out of a desire to provide protection for foreign works whereby the nations agreed to recognize and protect the rights of foreign artists within their own domestic borders. The issues for international patent and international copyright protection was not the absence of similar domestic laws but rather the refusal to extend domestic protection under the law to the work of foreigners. The Berne and Paris conventions did not create new laws for the member states. Rather they reflected a consensus reached among the states which were legitimized by the existence of a similar system within their respective domestic territories. Irrespective of Berne and Paris conventions, the

[53] K R G Nair and Ashok Kumar (ed.), *Intellectual Property Rights*, 1994, p.7.
[54] Ruth L. Gana, "Has Creativity Died in the Third World? Some Implications of the Internationalization of Intellectual Property", 1995, p.123.

late industrializing countries like United States and Germany adopted patent protection in the products where there was a danger of imitating their inventions. There were flexible national patent laws for those products for which technology was imitated from other countries as at that time the economies of United States and Germany were at a developing stage and needed the diffusion of information from Britain for their own industries.

The need for Trade Related Aspects of Intellectual Property Rights (TRIPs)

Paris and the Berne Conventions have been a step towards the formation of TRIPs in 1994. Before the introduction of TRIPs within the WTO, most issues relating to intellectual property was dealt primarily by World Intellectual Property Organization (WIPO). WIPO was established by a convention (the convention establishing the World Intellectual Property Organization), which concluded in Stockholm in 1967 and entered into force in 1970.[55] WIPO became a specialized agency of the United Nations system of organizations in 1974. Under the agreement between the WIPO and the United Nations pursuant, WIPO is responsible for taking action for promoting creative intellectual activity and for facilitating the transfer of technology to the developing countries in order to accelerate their economic, social, and cultural development. But WIPO did not have the scope to cover trade related intellectual property rights within its realm, an issue of increasing importance to the world's leading exporters of intellectual property, especially the US and Western Europe. The Uruguay Agreement of trade negotiations introduced new subject matters within the realm of intellectual property rights like geographical indicators and domain names and these along

[55] Fritz Machlup, "An Economic Review of the Patent", in Frederick Abbott, Thomas Cottier and Francis Gurry (ed.), *The International Intellectual Property System: Commentary and Materials* (Part One), 1999, p.303.

with patents, copyrights, trademarks, and trade secrets were clubbed as trade related aspects of intellectual property rights.[56]

In the 1970,s there was concern among the manufacturers of luxury items such as expensive watches on the production of cheap counterfeits, largely in South East Asian countries which had few domestic laws to prevent such activities. This led to US attempts during the Tokyo Round of talks of multilateral trade negotiations (1973-79) to have intellectual property rights strengthened within the GATT. But these efforts failed, largely because of opposition from the developing countries who argued that WIPO was the institution where such matters were to be discussed. WIPO was a UN agency and was perceived to be more open and sympathetic to the views of developing countries. But, from the American perspective, WIPO was neither an adequate nor an appropriate vehicle to secure the intellectual property rights of US interests. A central purpose of the TRIPs agreement negotiations was to shift the center of gravity in the international Intellectual property rights arena from WIPO to the new WTO.

The origins of the TRIPs agreement as a manifestation of international intellectual property rights can be traced back to the late 1970s, when the growth of trade in counterfeit goods led to the mobilization of corporate actors on a global scale with the formation of the anti-counterfeiting coalition. The coalition provided an important industry input into the drafting of a code on anti-counterfeiting. During the Tokyo Round of the GATT between 1973 and 1979, trade in counterfeit goods emerged as a serious issue and was no longer simply considered as an "acceptable

[56] Ruth L. Gana, "Prospects for Developing Countries Under the TRIPS Agreement", *Vanderbilt Journal of Transnational Law*, Vol. 29, No.2, 1996, p.739.

obstacle" to free trade. But, the inability of developed countries to bring in a consensus on international code on anti-counterfeiting, galvanized corporate interests to support the common aim of getting intellectual property protection on the agenda for the subsequent Uruguay Round of GATT negotiations.

By the early 1980s, intellectual property had become a trade issue of considerable importance to many rich industrialized countries. With the emergence of newly industrialized countries, the rich and previously industrialized countries began to lose older labor-intensive manufacturing and started believing that technological innovation and research intensive activities can keep them ahead in trade competitiveness. As a result of TRIPs, the emphasis is now on knowledge as a form of expression for claiming intellectual property rights while at the same time protection based on individual ownership and autonomy which are specific features of capitalist societies are also maintained.

The need for TRIPs arose due to similar concerns of the developed countries as was seen soon after the industrial revolution. As international trade developed and the significance of technology as a commodity of that trade increased, an awareness of the importance of intellectual property protection also grew.[57] With the transformation of industrial economies to information economies, it became all the more important to protect intellectual property right. The existence of a similar system of patent and copyright laws within the domestic territory of member states where similar protection was given to foreign invention was no longer sufficient. The need for TRIPs was felt due to the vulnerability of

[57] Graham Dutfield, *Intellectual Property Rights and the Life Science Industries*, 2003, p.8.

information based economies to the demands of the market for pirated and counterfeit goods. With globalization there is a free access to information and with easier ways of acquiring knowledge, there are times when the intellectual capacities of others are exploited. The best example of this could be internet information sources which are used to meet quick gains and in the process they aid in intellectual property right violations. Piracy in the music industry is also an example of copyright violations which have become easy due to the convenient access of these sources after globalization. The problem of using domain names is also an issue as far as Intellectual Property Rights is concerned. Though the registration of domain names on the internet is done on the first come first serve basis but there is no government control over them and are easily infringed upon where domain names of popular companies are taken many times violating the trademark rights of certain companies.[58] Violations of these kinds have meant a stronger advocacy for intellectual property right laws. Piracy of medicines in the pharmaceutical industry, where the developed countries feel that the free flow of information and technology have led to breakthroughs in medicine and medical products easily reaching the developing countries at cheaper rates. This violates the patent rights of the western pharmaceutical companies. Therefore within TRIPs, they are not only advocating for process but also product patents which would now result in medicines and other medical products no more being available at cheaper rates in the developing countries

The prescription under TRIPs is both what must be protected and also how it must be protected while the earlier conventions focused more on the elements of

[58] Daljit Singh and Bharat Bhushan Parsoon, Evolutionary Domain of Intellectual Property Rights: Infringement and Remedies, in A.K.Kaul and V.K.Ahuja (ed), *The Law of Intellectual Property Rights : In Prospect and Prospect* (New Delhi: Faculty of Law, 2001), p.38.

protection.[59] TRIPs seeks to address the current areas of intellectual property protection like information technology, biotechnology, and pharmaceuticals. TRIPs is more rigid and a condition for all countries to participate in international trade which was not in Berne and Paris conventions.

Under TRIPs, all kinds of intellectual property rights are brought within one fold rather having separate systems for each of them. Moreover, there is an elaborate system of monitoring within TRIPs. Dispute arising under the agreement are governed by the central dispute resolution process of WTO. This elaborate system of monitoring did not exist in the earlier attempts to harmonize intellectual property rights as WIPO was limited in its scope.[60] Intellectual property rights within TRIPs has meant universalization of the process of claiming the rights to intellectual property and includes patents, copyrights, trademarks, industrial designs, and trade secrets. Under TRIPs for the first time new subjects have been introduced within the existing intellectual property rights like for example product patents for food, pharmaceuticals, chemicals, microorganisms or copyright protection for food, pharmaceuticals, chemicals, microorganisms or copyright protection fro software. TRIPs agreement has also created new categories of rights under existing types of intellectual property for the majority of WTO members such as rental rights for computer programmes and sound recording under copyright and related rights; higher level of protection for geographical indications for wines and spirits.

[59] Surendra Bhandari, *WTO and Developing Countries* (New Delhi: Deep and Deep Publishers, 1998), p.24.
[60] Ibid.

It is now important to analyze the justifications for uniform intellectual property rights laws within TRIPs. Since it was with the development of a certain kind of economy and technological advancement therefore the justifications given for it is also a part of the values prevalent in capitalist structures.

Intellectual property protection for the inventors is advanced on ethical grounds in the name of "justice" or "natural rights" or on pragmatic utilitarian grounds, in the name of "promotion of public interest".[61] Based on these grounds of justification, the reasons given for intellectual property rights can be divided into four groups. The classical justification in favour of intellectual property rights argues that the individual should be entitled to the fruits of his labour as a natural right and intellectual property are also the result of one's labour. The justification for intellectual property right on the basis of natural right assumes that man has a natural property in his own ideas and any appropriation by others of these ideas without consent would be stealing. Hence enforcement of exclusivity in the use of a patented invention is the only appropriate way for society to recognize this property right. This justification dates back to John Locke's justification of private ownership of property. Today, intellectual property rights are justified as means to encourage inventions and creative activity as a form of positive right. Not only are they justified for encouragement and recognition but it is said that they provide the finances for further inventions.

The "reward-by-monopoly" thesis assumes that a man should receive reward for his services in proportion to the usefulness of the work to society and wherever

[61] Nachane, "Intellectual Property Rights in the Uruguay Round: An Indian Perspective", *Economic and Political Weekly*, Vol. 30 No. 6, 4 February 1995, p.257.

needed the society must intervene to secure him such reward. As Bibek Debroy says "The fact that private knowledge becomes public knowledge deserves a reward which is enshrined through limited monopoly."[62] The "monopoly-profit incentive" thesis of justifying the need for intellectual property rights assumes that industrial progress is desirable, that inventions and their industrial exploitation are necessary for such progress. The "exchange-for-secrets" thesis presumes a bargain between inventor and society, the former surrendering the possession of secret knowledge in exchange for the protection of a temporary exclusivity in its industrial use. The presupposition again is that industrial progress at a sustained rate is not possible if inventors and innovating entrepreneurs keep inventions secret. The idea has been to prevent restrictive trade practices and at the same time protect from the problem of free riding. Therefore though intellectual property rights provide monopoly rights over the product for a few years it has been justified on the basis that it encourages the free flow of product. The idea is to protect the rights of creator of a certain invention by not letting others enjoy the fruits of it without paying the costs for doing so. Therefore any creator of an original work or a new idea or even if the work is an improvement over the previous is entitled to get the due credit in the form of a certain reward whenever his or her creation is put to public usage. Thus intellectual property rights endorse individual claims to creative knowledge and in a certain manner commodifies knowledge and information.

The above concerns have not only led to demands for better intellectual property protection within the domestic territories of each country but also for a universal

[62] Bibek Debroy, "Intellectual Property Rights: Pros and Cons", *Social Action*, Vol. 48, October-December 1998, p.350.

system of intellectual property right laws which should be administered at an international level. This has resulted in the emergence of TRIPs which seeks to bring in uniform laws for intellectual property protection but whether such a system would result in solving these problems is what is being questioned today.

The Problems within TRIPs

The justification given for the need for intellectual property rights can be questioned with respect to the purpose that they have served in the last few decades. The primary argument given in favour of intellectual property rights is that they provide better conditions for the appropriability of innovations. Many studies show that the effectiveness of patent protection varies from industry to industry and is most effective only in chemical and pharmaceutical industries. A study by Mansfield (1986) showed that around 65 percent of pharmaceutical and 30 percent of chemical inventions would not have taken place but for patent protection.[63] In case of most other industries patent protection is not really important and not the motivating factor for innovations. In several high technology industries like aerospace and industrial machinery the complexity of the products made reverse engineering very expensive and therefore there was hardly any threat of imitation even without patent protection.

The imitation of technology in the form of piracy is not a phenomenon of the current stage of technological development but has been a pattern which was followed by the developed countries when they were at the initial stages of

[63] Nagesh Kumar, "Intellectual Property Rights, Technology and Economic Development: Experiences of Asian Countries", *Economic and Political Weekly*, Vol. 38 No. 3, 18 January 2003, p.211.

industrial development. There is a need to protect creative knowledge to secure the interests of the innovators but the protection should not be aimed to restrict the levels of development of countries which are currently at a crucial stage of industrial development and need to have access to the technological knowledge of the developed countries.

The problem with TRIPs or intellectual property rights as such is that its laws and provisions are based on an understanding of capitalistic western societies. This view is also supported in a lot of literature from the developing countries. People like Vandana Shiva, Arun Agrawal, Suman Sahai, Smita Mishra have supported this view.[64] Jagdish Bhagwati criticized TRIPs on two grounds: first, that it will increase financial transfers from poor to rich countries in the form of loyalties and license fees, thereby further impoverishing the former and enriching the latter nations; and second, that it is protectionist because it allows developed countries to impose sanctions on countries that fail 'adequately' to respect their companies' intellectual property rights.[65]

The developing countries agreed to accept the TRIPs agreement as part of a package deal whereby protection of intellectual property rights was a trade off for concessions on agricultural products and textiles. Developed countries argued that enhanced global protection of intellectual property rights would stimulate higher investments in developing countries. Carlos Correa and other eminent scholars, on

[64] See Vandana Shiva, *Patents: Myths and Realities* (New Delhi: Penguin, 2001), p.102-105; Arun Agrawal "Indigenous Knowledge and the Politics of Classification", *International Social Science Journal*, September 2002, Vol.173, p.290.; Suman Sahai "Importance of Indigenous Knowledge in Intellectual Property Right System", *Economic and Political Weekly*, Vol. 31 No.47, November 1996, p.3044.

[65] K R G Nair and Ashok Kumar (ed.), *Intellectual Property Rights*, 1994, p.58.

the basis of a United Nations (1993) study concluded that innovative companies in developed countries are likely to sell directly to developing countries rather than transfer technology through FDI and licensing agreements and they also concluded that there is no evidence that intellectual property protection will positively influence access to FDI at all. [66] But there are other similar studies which contend that greater patent protection attract greater foreign direct investment. There has not been any consistent relation between foreign direct investment and stronger or weaker patent protection. In any case, FDI flows to developing countries tend to be concentrated in few countries, with four- China, Mexico, Malaysia, and Brazil- accounting for 55% of all FDI flows to developing countries in 1994 and 1995. [67]

Intellectual property rights as understood in western capitalist societies of which TRIPs is an important part, is a certain kind of individual ownership of creative products. Along with attaching a value to the products of creative mind it also commodifies knowledge. These values came in with the changes in western societies both in their economy and also in their political system. But these values have not necessarily been an attribute of Chinese, South American, African and Asian societies. These societies did not go through similar stages of economic transformation as the west and therefore, for them, individual ownership and privatization which are typical to a liberal economy came with colonialism and not through a natural process. In this respect, in most developing countries, even today apart from the presence of individual and private ownership, there is

[66] Nagesh Kumar, "Intellectual Property Rights, Technology and Economic Development: Experiences of Asian Countries", 2003, p.213.
[67] Carlos A. Primo Braga, Carsten Fink and Cludia Paz Sepulveda, "Intellectual Property Rights and Economic Development", in Frederick Abbott, Thomas Cottier and Francis Gurry (ed.), *The International Intellectual Property System: Commentary and Materials* (Part One), 1999, p.1853.

presence of community ownership where the fruits of a particular product or invention are shared by the all within a particular community. Therefore the argument that the concept of intellectual property right can be used for providing the local communities with rights for their contribution does not hold good. This kind of an argument does not recognize the explicit links between power and knowledge. The way knowledge is generated, organized, stored, and disseminated presupposes certain relationships of power and control.[68] Any attempt to make local knowledge come under intellectual property right laws or to make local knowledge public would undermine the control that these communities have over their knowledge. Any such attempts to bring indigenous knowledge and the communities that protect such knowledge under intellectual property rights as is the attempt within TRIPs would only reproduce the control that elites exercise over scientific knowledge. In other words, such a system would not benefit the local communities but would be beneficial to the richer and more powerful institutions that possess access to international centers of knowledge preservation. Therefore knowledge freely available to all might not benefit all equally.

The objection to the application or implementation of intellectual property right laws uniformly to all societies could be the difference in the way the capitalist and developing societies understand creative rights. But a more important objection would be that uniform intellectual property right laws would lead to benefits going to individual and certain groups while the rights of the local communities would be marginalized. The disadvantages of making the knowledge of local communities' knowledge public are already visible. The scheme of granting

[68] Arun Agrawal, "Dismantling the Divide between Indigenous and Scientific Knowledge", *Development and Change*, Vol. 26, 1995, p.431.

patents within TRIPs is in relation to the first claimant of the patent and not the first inventor. The patents are most of the time claimed by private firms and on products and methods which are the efforts of local communities and this has led to biopiracy of the knowledge of these communities.[69] In the 1970s for example, the National Cancer Institute (NCI) of the United States invested in extensive collections of *Maytenus buchannil* from the Shimba Hills of Kenya. NCI was led by the knowledge of the Digo communities who have used the plant to treat cancerous conditions for many years. More than 27.2 tons of the shrubs were collected by the NCI for testing maytansine, which was considered a potential treatment for pancreatic cancer. All the material was traded without the consent of the Digo, neither was there sufficient recognition of their knowledge of the plant and its medicinal properties.[70] There are a few exceptions where the private industries have developed mechanisms for returning some of the benefits from the commercialization of medicinal plants and traditional knowledge to the local communities.

The advocates in the North have argued for better intellectual property right laws for royalty incomes, to have less competition for their exports and to stop grey imports. This could according to the developed countries help in promoting better technological, research and development transfers to the developing countries as there would be less scope for piracy. But as argued earlier, TRIPs also has resulted in the benefits going in the way of certain groups and it promotes a particular definition of knowledge for commercial ends. The profits of such an interpretation

[69] Ashish Kothari, "Biopiracy Unlimited", *Frontline*, Vol. 15 No. 9, April 17 1998, p.67.
[70] Willem Pretorius, "TRIPs and Developing Countries: How Level is the Playing Field?" in Peter Drahos and Ruth Mayne (ed.), *Global Intellectual Property Rights-Knowledge, Access and Development* (New York: Palgrave Macmillan, 2002), p.186.

of creative knowledge seem to be reaching the developed countries which are one of the concerns of the developing world.

The concentration of monopoly rights and secret information for particular goods could also lead obstacles in further innovations in a particular field as that information could be the building blocks for any further enquiry into the subject. For example the DNA segments where inventors claim routinely that these could be useful in helping researchers find other DNA segments.[71]

Intellectual property rights moved to the developing countries from the developed countries as an outcome of processes of empire-building and colonization. For example, in parts of pre-independent Malaysia it was English copyright law that applied. Patent law at Philippines also reveals the forces of empire at work.[72] After independence, many developing countries started reviewing their intellectual property laws. For example, after independence in India, two expert committees were formed to conduct a review of the Indian patent system. After the results of the expert committees came out, India chose to redesign its patent system to suit her own national circumstances. India was not the only country to revise its patent system, but there were others like Brazil, Mexico, Argentina, and Mexico.[73] Therefore the argument that the developing countries have always been averse to intellectual property laws does not hold good. The developing countries indeed revised their intellectual property right laws to suit the needs of industrial development in their countries. But, such revisions were done in the developed

[71] Jayashree Watal, *Intellectual Property Rights: In the WTO and Developing Countries* (New Delhi: Oxford University Press), 2001, p.133.
[72] Peter Drahos and Ruth Mayne, *Global Intellectual property Rights: Knowledge, Access and Development*, 2002, p.164.
[73] Ibid.

countries like United States during the course of its industrial development. In order to protect their goods from foreign goods all countries in the past have mended their intellectual property right laws and it is not a novel idea started by the developing countries. On the contrary the developing countries learnt this from the developed countries themselves.

The biggest objection to TRIPs, is probably, its association with coercive power. The TRIPs Agreement not only has many flaws at the conceptual level but is based on a coercive mechanism of negotiation. The TRIPs negotiations reveal the arbitrary character of the agreement and the application of unilateral mechanisms by United States and European Union countries on developing countries forcing them to adhere to the provisions of TRIPs. The United States through the implementation of US Trade Act 301 took the role of surveillance of those countries which failed to match the international standards of intellectual property rights.[74] Thus whichever country came under its watch list had to face trade sanctions eventually resulting in many countries agreeing to sign the TRIPs agreement. Any agreement having been established on the basis of coercive means of negotiations cannot be equal and has resulted in the benefits going to the individual firms and ultimately to the developed countries.

The universal intellectual property right system in the form of TRIPs has been part of larger process of commercialization of creative knowledge and is not a sudden development but has been under progress since the emergence of capitalism. The early attempts to recognize creative knowledge cannot be equaled with present

[74] Ann Capling, "Intellectual Property", In Brian Hocking and Steven McGuire (ed.), *Trade Politics- International, Domestic and Regional Perspectives* (New York: Routledge Publications, 1999), p.83.

form of intellectual property rights as they were merely claims of authorship and were not considered as "property" they we understand creative knowledge today. Some justifications given for stronger rules for the management of intellectual property rights may be justified but the manner in which these rules are imposed in the form of TRIPs by certain groups and countries on others demonstrate the operation of coercive power mechanisms and a complete lack of understanding of the societies in the developing countries.

These issues and concerns which are vital to TRIPs are not only confined to economic field but it also tries to define rights, property, and knowledge in a particular manner resulting in the exercise of power by certain groups. Therefore explicit links between power and knowledge while benefiting some leads to the marginalization of others like the local communities. Therefore it becomes necessary to understand TRIPs within the framework of globalization and capitalism which would eventually aid in the understanding of the differences between developed and developing countries. Further it is essential to study the TRIPs negotiations in detail and the impact of the provisions on the local communities of the developing countries to bring out the coercive power mechanisms used in international politics as well as by a particular economic system like capitalism while bringing about a multilateral treaty

CHAPTER III

TRIPs Negotiations: An Analysis

Trade Related Intellectual Property Right was the result of negotiations that took place from September 1986 to December 1993, as part of the Uruguay Round of Multilateral Trade Negotiations of the GATT.[75] These negotiations were launched at Punta del Este, Uruguay, and were formally concluded in April 1994 at Marrakesh, Morocco. It is important to discuss TRIPs negotiations to understand not only how the agreement came into existence but also to reveal the dynamics of power politics under play that was evident during the negotiation of the agreement. The negotiations saw the interplay of power politics both between the North and South as well as amongst the countries of the North. These negotiations provide a platform for understanding of TRIPs agreement along with the current debates on intellectual property rights. Since the duration of the negotiating period was long and arduous, it does not demonstrate a consistent view taken by states throughout the negotiating period. The changes in the international scenario and the pace of globalization made certain states change their stance during the course of the negotiations. Therefore the TRIPs negotiations need to be discussed mainly for two reasons. One to illustrate the power relations that have emerged in the current phase of globalization and second to demonstrate how states act under compulsions of international politics as well as under pressures from powerful domestic interest groups in the globalization process.

As discussed in the earlier chapters the need for a multilateral agreement on intellectual property rights was not sudden, as similar attempts of integration were

[75] Jayashree Watal, *Intellectual Property Rights: In the WTO and Developing Countries*, 2001, p.11.

made earlier in Paris and Berne Conventions. But the increase in the pace of globalization and changing economic scenario across the globe certainly forced a more comprehensive and detailed multilateral agreement for the management of intellectual property rights. It is important to note that initial attempts to address the issues related to intellectual property rights came from the developing countries in their suggestion to revise the Paris convention. These countries since 1974 had been demanding a revision of the Paris Convention to further lower the standards of industrial property applicable to them.[76] The developing countries felt that the standards embodied in the Paris Convention prevented them from adopting development provisions in their national laws pertaining to industrial property. The revision process of the Paris Convention, which was close to conclusion at the second session of the diplomatic conference held in Nairobi in 1981, broke down at the third session at Geneva in 1982, just four years before the *Punta Del Este* declaration to launch the Uruguay Round was made.[77]

There were differences between the developing countries and the developed countries over exclusive compulsory licensing of patents that excludes the patent owner from using his own invention. After the failure to revise the Paris Convention, the United States in the 1980s, catering to the demands of the changing economic pattern, started strengthening the enforcement of patents within the US. The growing economic competition from countries such as Japan, South Korea, and Taiwan which were catching up by copying the US products and selling them at a much cheaper rate compelled the US to strengthen its patent regime. The US industry, operating through the government, also became more

[76] Susan Sell, *Power and Ideas: North-South Politics of Intellectual Property and Antitrust* (New York: State University of New York Press, 1998), p.110.
[77] Jayashree Watal, *Intellectual Property Rights: In the WTO and Developing Countries*, 2001, 16.

active in demanding strengthened intellectual property protection in other countries.[78] A study by the US International Trade Commission claimed that in 1982 alone, 131,000 American jobs were lost due to foreign counterfeiting of American goods.[79] It was during this time that United States went on to prove itself as an advocate of 'Fair Trade' rather than 'Free Trade' in order to amend some of the losses incurred by it.[80] Even at the political level politicians nurtured the electorate to think of US as a fair trader and others, in varying degrees, as unfair traders.

With the changing trade relationships in the 1980s it also became clear that the General Agreement on Tariffs and Trade was inadequate to meet the needs of its member countries. The Uruguay Round was therefore launched with the larger aim of bolstering the waning credibility in the GATT structure.[81] The developed countries attempted to introduce an anti-counterfeiting code into the GATT disciplines during the Tokyo Round. In 1970s, growth of trade in counterfeit goods led to the mobilization of corporate actors on a global scale with the formation of the Anti-counterfeiting coalition, an alliance of 100 multinational corporations with the common aim of encouraging national governments to strengthen protection against counterfeit trademarked goods.[82] This coalition provided an important input into the drafting of a code on anti-counterfeiting. The developed countries wanted to introduce the anti-counterfeiting code primarily to

[78] Susan Sell, *Power and Ideas: North-South Politics of Intellectual Property and Antitrust*, 1998, p.131.
[79] Ann Capling, "Intellectual Property", in Brian Hocking and Steven McGuire (ed.), *Trade Politics International, Domestic and Regional Perspectives*, 1999, p.83.
[80] Jagdish Bhagwati, *Free Trade Today* (New York: Oxford University Press, 2002), p.56.
[81] Ernest H. Preeg, *Traders In a Brave New World: The Uruguay Round and the Future of International Trading System* (Chicago: The University of Chicago Press, 1995), p.11.
[82] Duncan Matthews, *Globalizing Intellectual Propert Rights: The TRIPs Agreement* (London: Routledge, 2002), p.9

guarantee that the pirated technology was not produced in the developing countries, which was posing a threat to important multinationals of developed countries. With the introduction of this code it would not be possible for the production or sale of counterfeit goods. But, no agreement was reached over this as only the US and the European Committee supported it. The Uruguay Round to a large extent was a spill over of the previous Tokyo Round and the GATT ministerial meeting of 1982.

The United States started the groundwork for the new round in 1981 but faced setback in 1982 due to opposition form the third world countries and differences within the Organization for Economic Cooperation and Development countries. There was a constant tussle between the developed and developing countries as far as issues related to intellectual property rights were concerned. When the developing countries wanted to revise the Paris Convention, there was no support from developed countries. This was due to fundamental differences between both sides on intellectual property right issues, which were natural given the difference in their level of development. These differences continued to play a vital role in deciding the shape of Uruguay Round negotiations and its outcome. The GATT ministerial meeting eventually took place in November 1982 which was evolved into an agenda for the Uruguay Round. There were initial meetings which took place in January, May, and July 1985, addressing the desirability of a new round and the possible issues to be negotiated. In November 1985 a Preparatory Committee (Prepcom) chaired by Director-General Dunkel was established and it met nine times during January-July 1986.

The Uruguay Round negotiations began in Punta Del Este with trade ministers of ninety-six negotiating countries meeting in September 1986 where a declaration to launch the Uruguay Round was adopted. There are three or four primary issues, which emerge while focusing on TRIPs negotiations. The first is the largely evident disparities between developed and developing countries. The negotiations were not simply about North-South differences but also about differences within the North which were reconciled by the time an agreement was reached. Another important aspect of the negotiations was the use of subtle and explicit power mechanisms during the time of negotiations, both outside and inside the negotiating table. The powerful role played by multinational companies of developed countries throughout the period of negotiations illustrate the role played by non-state actors in the decision making process in contemporary globalization.

There were significant differences between developed and developing countries over intellectual property rights. These differences were not only with respect to the distinct laws followed in developed and developing countries but also in the way they viewed intellectual property rights within the ambit of international organizations. The developing countries resisted the attempts made by Japan, European Union, and United States to include intellectual property rights within GATT. WIPO which was dealing with intellectual property rights issues was a more neutral organization and sympathetic towards developing countries' concerns and therefore these countries did not want intellectual property rights to fall under GATT, which was largely dominated by the powerful developed countries.[83] But, this resistance could not continue for a very long period and the

[83] Rohini Acharya, "Patenting of Biotechnology: GATT and the Erosion of World's Biodiversity", *Journal of World Trade*, Vol. 25 No. 6, December 1991, p.71.

United States succeeded in including intellectual property rights within GATT by introducing it in Punta del Este. Moreover, twenty five developing countries who had initially objected to this in Tokyo were reduced to ten in Punta del Este and their number was not significant enough to make a difference. In Punta del Este the final text of the declaration called for negotiations "to develop a framework of principles, rules and disciplines dealing with international trade in counterfeit goods" but the declaration vaguely defined the subject of trade related aspects of intellectual property rights. However, the larger goal of the United States to include the intellectual property rights within GATT and the new round of trade negotiations was achieved. The Punta declaration called for the elaboration of new rules and disciplines for intellectual property rights and the United States brought out a detailed proposal for the protection of Intellectual property rights comprising primarily of three elements[84]:

1. Dispute Settlement: The United States proposed for the adoption of GATT procedures for consultations and dispute settlement, including possible retaliation by withdrawing the trade benefits.
2. Domestic enforcement: It was proposed that the commitments covering both imported and domestic goods would be undertaken to ensure "prompt, fair, reasonable, and effective" administrative and legal procedures against infringers of intellectual property rights.
3. Standards: In this most controversial area, the United States wanted standards of protection raised to the levels of the industrialized countries.

[84] Ernest H. Preeg, *Traders In a Brave New World: The Uruguay Round and the Future of International Trading System*, 1995, p.24.

Even after the inclusion of intellectual property rights within the Uruguay Round disparities between developed and developing countries got reflected during the negotiating phase. Developing countries did not want the inclusion of intellectual property rights within GATT as they argued that intellectual property rights were needed to promote inventions and they need not be mixed with trade benefits. United States and other developed countries shared the view that as intellectual property had become an increasingly important component of national wealth and international trade, it was the subject of trade protection and should be a part of GATT.[85] The concept of trade-relatedness of intellectual property rights is a recent development. Trade relatedness implies having an impact on international trade flows.[86] The developing countries accepted the clear mandate to negotiate trade in counterfeit goods, but felt that these negotiations should be restricted to the examination of trade effects of counterfeiting without entering the discussion of "what constitutes counterfeiting". Brazil and India were leading the opposition to the discussion of substantive norms and standards of intellectual property rights in the TRIPs negotiations. They even insisted that developing countries need not make concessions that are inconsistent with their developmental, financial and trade needs. In October 1988 Brazil's written submission to the TRIPs negotiating group argued that the mandate of the group was to discuss trade-related aspects of intellectual property rights and their relations to trade distortions and restrictions

[85] Frederick M. Abbott, "Protecting First World Assets in the Third World: Intellectual Property Negotiations in the GATT Multilateral Framework", *Vanderbilt Journal of Transnational Law*, Vol. 22, No. 4, 1989, p.692.

[86] C. Niranjan Rao, "Trade Related Aspects of Intellectual Property Rights: Question of Patents", *Economic and Political Weekly*, Vol. 24, No. 19, 13 May 1989, p.1053.

and access to technology through obligations on intellectual property right owners.[87]

Most developing countries followed process patents rather than product patents. Product patent involves protection of the new active compound or the good itself, irrespective of the method by which it is produced or the form or manner in which it is sold. But, process protection implies that only chemical methods by which an active substance is produced can be protected.[88] This enabled the developing countries to have drugs reach markets in a subsidized rate affordable for everyone. But, during Uruguay Round negotiations it was proposed that patents should be registered for products as well which received again a strict opposition from developing countries. Developing countries expressed concerns about over-protection of intellectual property rights with the introduction of product patents obstructing the transfer of technology and increased costs of pharmaceutical and agrochemical products. Developed countries believed that intellectual property rights protection would eventually be useful for stimulating higher levels of research and development.

A large number of developing countries believed that establishing an international intellectual property right regime is likely to be detrimental to their growth and development. They opined that since technologies are largely being developed in industrialized countries, the developing countries would find it difficult to gain access to these new technologies. The developed countries on the other hand were

[87] Jayashree Watal, *Intellectual Property Rights in the WTO and Developing Countries*, 2001, p.25.

[88] Kabiraj, Tarun, "Intellectual Property Rights, TRIPs and Technology Transfer", *Economic and Political Weekly*, Vol.29, No. 47, 19 November 1994, p.2994.

of the view that without an international agreement on intellectual property rights, trade distortions would continue, as the patent policies of developing countries were inadequate. These distortions result in heavy losses for the developed countries and therefore a strong intellectual property regime needed to be established.

The Indian government along with other developing countries submitted its proposal in the later part of the negotiations and the primary issues raised were with regard to product patents, re-examination of the provisions of Article 27.3 (b) dealing with patenting life forms and issues related to public health. The Indian proposal stated that intellectual property rights should be under the domain of WIPO and not a part of the GATT.[89] India along with Brazil led the battle against the developed countries during the TRIPs negotiations for which it came under the "Top Priority Watch List" of US.

The fierce resistance to proposals made by developed countries from developing countries sustained till 1988, after which most of the developing countries complied with the TRIPs proposals primarily because of the use of force both subtle and coercive and the compulsions of international politics and global needs.

[89] India has been constantly raising issues related to TRIPs, even after signing of the agreement. The Government of India has raised issues related to Article 27.3 (b) in its communication dated 3 November 1999 where there has been suggestions made to exclude patents on all life forms and exclude patents on traditional knowledge and consent of the country before its biological resources are exploited. In its communication dated 12 July, 2000, the Government of India suggested mechanisms for effective implementation of the provisions relating to transfer of technology which are related to Article 7 and Article 8.2 of TRIPs. Again in communication dated 29 June 2001 India raised the issue of TRIPs and public health and suggested that the TRIPs agreement should not in any way undermine the legitimate right of WTO Members to formulate their own public health policies and implement them by adopting measure to protect public health. For further details, See, *Report of the Peoples' Commission on Patent Laws for India,* (New Delhi: National Working Group on Patent Law and Public Interest Legal Support and Research Centre, January 2003), pp.40-43.

Differences with the developing countries were not resolved so much by negotiating techniques but more by the use of bilateral and unilateral means adopted by the United States and the European Community countries. Though it might seem that the developing countries opposition ended quite suddenly due to the negotiating skills of the developed countries, yet this was not the case. Much of the differences between the developed and the developing countries were solved by the unilateral action taken by the United States and the European Community.

In the area of unilateral action, the US government already had recourse to section 337 of the US Tariff Act of 1930 which allowed the seizure of any imports which are alleged to contravene US intellectual property laws. But, this scope for unilateral measures was considerably enhanced with the passage of Section 301 of the Trade Act of 1974 which allowed the US administration to take action against other countries deemed to have inadequate intellectual property rights, regardless of whether imports to the US were involved. This was further strengthened with the passage of the Trade and Tariff Act of 1988 in the form of what came to be known as the 'Special 301', which gave the US president the right to withdraw preferential tariffs or impose punitive tariffs on any goods imported from countries which according to the US had inadequate intellectual property right regimes.[90] The 'Special 301' became notorious as under it the US Trade Representative (USTR) had the right to identify all the nations which have intellectual property regimes objectionable to US trade interests. While Section 337 was designed to protect US intellectual property owners from violations in

[90] Susan Sell, *Power and Ideas: North-South Politics of Intellectual Property and Antitrust*, 1998, p.83.

import trade, the Special 301, Section 302 and Super 301 were designed to induce change in the intellectual property regimes of America's trading partners using as leverage, access to the highly coveted US market. The US Section 301 targeted both the copyright and patent laws of Brazil in 1985. Similarly, in September 1988, the USTR initiated an investigation into Argentina's pharmaceutical patent protection, which was withdrawn a year later in September 1988 on a promise by the Argentine government to constructively address the issue of intellectual property rights in the Uruguay Round Negotiations. In 1989, Thailand was placed on the priority watch list under Special 301 on a charge of weak enforcement of copyright law and denial of adequate and effective patent protection for pharmaceutical products. Similarly other developing countries like India for one reason or the other came under the USTR's Watchlist. This has been argued as one of the reasons for the developing countries agreeing to most of the provisions within TRIPs. When the USTR announced the targets of 'Special 301', five of the ten developing countries that were members of the hard-line group in the GATT opposing the US agenda found themselves listed for bilateral attention. Brazil and India, the two leaders were placed in the more serious category of Priority Watch List, while Argentina, Egypt and Yugoslavia were put on the Watch list.[91] US bilateralism was not limited to these countries. By 1989 US was signing copyright and patent agreements with Indonesia, Taiwan, Saudi Arabia, and Columbia. The use of the 301 process by the US against India and Brazil was particularly important.[92] Similarly, Thailand agreed to improve its intellectual property

[91] Peter Drahos, "Negotiating Intellectual Property Rights: Between Coercion and Dialogue", in Peter Drahos and Ruth Mayne (ed.), *Global Intellectual Property Rights: Knowledge, Access and Development*, 2002, p.170.

[92] The US brought 301 actions relating to intellectual property against Brazil in 1985 and 1987 and against India in 1991. Susan Sell, "Intellectual Property Protection and antitrust in the developing world: crisis, coercion, and choice", *International Organization*, Vol. 49, No.2, Spring 1995, p.326

protection in response to the 1990 Section 301 filling over its lax copyright enforcement. The US is Thailand's largest export market, providing the US with significant leverage. The USTR has repeatedly sighted Thailand in its priority watch list and finally in 1991 patent protection case Thailand indicated that it would consider compliance and "is looking to the results of the GATT negotiations for possible guidance".[93] Thus most of these countries came forward to agree to the TRIPs provisions and in order to avoid the USTR's sanctions they have at least in paper agreed to these provisions. Moreover, in countries like Thailand domestic compulsions forced them to oppose TRIPs. Intellectual property protection is controversial in Thailand because piracy has become a lucrative business. In 1987, Prime Minister Prem Tinsulanond's administration was ousted for attempting to strengthen copyright laws.[94] Leaving aside their domestic compulsions most of these countries decided to go with the developed countries in the later stages of the TRIPs negotiations.

Explicit and blatant use of coercive power by developed countries was one way through which they made developing countries agree to TRIPs provisions. It is perhaps because of this forced agreement that even after TRIPs essential differences remain between developing and developed countries as far as intellectual property rights are concerned. Power was a central element right from the time Uruguay Round negotiations were initiated. The fact that developed countries were more informed about intellectual property rights and its implications on international trade made them more powerful while negotiating

[93] Ibid, p.38

[94] Chris Shore, "The Thai Copyright Case and Possible Limitations of Extraterritorial Jurisdiction in Actions Taken Under Section 301 of the Trade Act of 1974", *Law and Policy in International Business*, Vol. 23, No. 3, 1992, p.731.

TRIPs Agreement. Developed countries entered the negotiations from a position of advantage, which they were able to exploit for their benefit during the negotiating period. Hours before signing the Dunkel Draft, Pranab Mukherjee, the then Commerce Minister of India in a statement to the press said "Can India afford to be walk out of GATT?"[95] This statement clarifies the position of most developing countries of the world. Even if these countries understood the problems within TRIPs and its negative impact for them, they could not remain out of the agreement as the Dunkel Draft was a package deal and to opt out of it would mean a deprivation of other trade benefits and moreover to face the wrath of United States' coercive economic sanctions.

But, the use of coercive bilateral and unilateral sanctions on developing countries was not the only reason for their compliance to TRIPs. The agreement was a part of a larger package of international trade consensus. Developing countries as part of Uruguay Round were getting substantial percentage of agricultural subsidies from developed countries, which they found lucrative. In order to gain these subsidies most developing countries including India decided to compromise by signing TRIPs agreement. Moreover, signing Dunkel Draft meant automatic membership to World Trade Organization (WTO), which was formed during the time of negotiations and membership to WTO was essential for all developing countries to be a part of international trade particularly at a time when most of them were liberalizing their economies. Membership to WTO for developing countries gave them the advantage of having Most-Favoured Nation Status (MFN), which they found essential for taking advantage of international trade.

[95] Priya Ranjan Dash, "Pranab Clarifies doubts on GATT", *Times of India*, 16 April 1994, p.8.

MFN status gave a number of relaxations while trading with other WTO members and these benefits could not be availed if a country was not a member of WTO. The MFN status meant that any advantage, favour, privilege, or immunity granted for any other country shall be accorded immediately and unconditionally to all other contracting parties. The MFN principle has been critical in reduction of tariff barriers and therefore it was essential for developing countries to hold on to this benefit. China for instance had to face a number of trade restrictions till 2000 as it chose to be out of WTO. Developing countries were not ready to lose this status as they believed that to compete with other countries in the current phase of globalization, it was essential that they were a part of the WTO. The developed countries during the negotiating period were able to bargain better by giving these types of concessions to developing countries and in return making the developing countries agree to their demands on intellectual property rights. Therefore the 'linkage-bargain diplomacy', played a very important role in TRIPs negotiations.[96] Developed countries were clever enough to offer package deals to developing countries and used subtle mechanisms of power to gain from Uruguay Round negotiations.

The techniques and procedures employed during the negotiating period were to the disadvantage of developing countries. Traditionally the GATT negotiations had involved the Green Room process where negotiators from all engaged countries face each other across the table and negotiate. Drafts are exchanged and progress is noted as differences are narrowed and brackets are removed in successive drafts. This Green Room process had, in the case of TRIPs, been

[96] Duncan Matthews, *Globalizing Intellectual Property Rights: The TRIPs Agreement*, 2002, p.45.

profoundly shaped by the consensus-building exercise that the private sector had undertaken outside the Green Room. There were meetings organized by the Friends of Intellectual Property Group in places such as Washington where the US circulated draft texts of the possible agreement. The groups formed outside the negotiation process were not only among the developed countries but also among the developing countries. It was in these informal groupings that much of the real negotiating was done and where the consensus and agreement that mattered was obtained.[97] Some of these groups are listed below:

1. US and Europe

2. US, Europe and Japan

3. US, Europe, Japan, Canada (Quad)

4. Friends of Intellectual Property (a larger group that included the Quad, Australia, and Switzerland)

5. 10+10 (the US and the European Union were always part of any such group if the issue was important. Other active members were Japan, Nordics, Canada, Argentina, Australia, Brazil, Hong Kong, India, Malaysia, Switzerland, and Thailand)

6. Developing countries groups for example, the Andean Group- Bolivia, Columbia, Peru and Venezuela; Argentina, Brazil, Chile, China, Columbia, Cuba, Egypt, Nigeria, Peru, Tanzania and Uruguay combined to submit a developing countries text in 1990)

In many of the important group meetings developing countries were not included, which left them ignorant on implications of many provisions within TRIPs. It was

[97] Peter Drahos, "Negotiating Intellectual Property Rights: Between Coercion and Dialogue", in Peter Drahos and Ruth Mayne (ed.), *Global Intellectual Property Rights: Knowledge, Access and Development*, 2002, p.168.

primarily the first three circles of consensus that really mattered in the TRIPs negotiations.

Another important reason for the developing countries not being successful in TRIPs negotiations was because they were not united in their opposition. Korea and ASEAN countries abstained form any open attacks on developed country positions.[98] The US and European Union's unilateral actions further helped in splitting the opposition camp of developing countries. Moreover, the industrial lobbies within the developing countries did not play the kind of role that was played by the industrial lobbies of the developed world in convincing their governments. Unlike the developed countries' industrial groups, the industrial groups of the developing countries could not coordinate with each other and thus were not an opposition for commercial interest groups within developed countries. There were several reasons for disunity among the developing countries. The absence of any formal coordinating mechanism such as the G-77 in GATT was one of the reasons as to why the developing countries could not bridge the differences among them. The US was able to win the silence of major developing countries through the effective use of Section 301 and other bilateral means. Once that was achieved, it was not difficult to get the approval of the less important developing countries. The developing countries had their differences with regard to their expectations from the Uruguay Round and notably the differences in agriculture and textiles. They were not able to come out of these differences and some developing countries also felt that for attracting FDI through unilateral liberalization it was essential to strengthen their intellectual property protection.

[98]Jayashree Watal, *Intellectual Property Rights in the WTO and Developing Countries*, 2001, p.26.

The degree of success that the US had achieved during this phase with some developing countries also had to do with reasons like dependence on US trade and investment.

Developing countries delegations largely adopted a defensive posture, arguing against what was almost decided, that is the re-organization of intellectual property norms based on universal norms mandatory for all the countries. Among all the developing countries it was only Brazil, which gave a proposal advocating the need for intellectual property rights not only for trade purposes but also for purposes of development and growth. Brazil was the only developing country to bring out a proposal along with the developed countries in the early stages of the negotiations. The other developing countries brought out their proposals in 1989, when the developed countries had already reached a consensus as far as TRIPs was concerned. The defensive posture seems to have worked against the developing countries in the later stages of the negotiations.

In this regard the Trade Negotiations Committee meeting in Geneva in April 1989 which took place after Punta Del Este was to a large extent a significant victory for the US and other developed countries. All parties agreed that negotiations would encompass the provision of adequate and effective standards for enforcement of and dispute settlement on intellectual property rights. It was decided that the developing countries were to be given transitional arrangements that is, time derogations to adhere to the results of the negotiations. As a further concession to the developing countries there was also an agreement to give consideration to developmental and technological objectives underlying the

national systems for the protection of intellectual property rights. India played an active role in finalizing the April 1989 text and was severely criticized at national level for succumbing to foreign pressure.[99]

Differences were not just confined between developed and developing countries during TRIPs negotiations but also among developed countries. These differences were primarily related to specific intellectual property rights issues but over all there was consensus among developed countries. Differences emerged during the introduction of various proposals in Uruguay Round negotiations. Both Japan and European Community supported the goal of better intellectual property rights protection around the world. Yet, they did not share the United States enthusiasm concerning the use of GATT to set international standards for intellectual property systems.[100] Like the United States, European Committee and Japan also presented their proposals and some differences emerged in the way they wanted inclusion of various intellectual property rights. For instance US did not include industrial designs as part of intellectual property rights and Japan did not include trade secrets. The issue of neighbouring rights, which refers to the rights of the producers, performers and broadcasting organizations to initiate action against pirates was strongly supported by Japan, the EU, Switzerland, and Australia but not by the United States. The United States wanted the recognition of rental rights, which comprises of rights of copyright owners to collect the extra royalties to cover the possibility that their computer program, film, or CD might be copied. This was opposed by Japan, Australia and other developed countries which

[99] "Intellectual Property Rights: Government buckles under US Pressure", *Economic and Political Weekly*, Vol. 24, No. 19, 13 May 1989, pp.1023-24.
[100] Braga, Carlos Alberto Brigo, "The Economics of Intellectual Property Rights and GATT: A View From the South", *Vanderbilt Journal of Transnational Law*, Vol. 22, No. 2, 1989, p.251.

allowed consumers to tape rented music recordings for their own personal use. Moral rights which include the right of the creator to preserve the integrity of the original work were another area of dispute among the developed countries. The United States opposed these moral rights on the grounds that these were not economic rights and therefore had no place in the TRIPs agreement.

There were also differences among the developed countries in terms of negotiating tactics. The European Community, for instance, suggested that negotiations should first address the issue of repression of counterfeiting and piracy. Only after sufficient progress in this area was achieved should the negotiations focus on "weaknesses in the availability and scope of basic rights". This view was not shared by United States, which wanted the Uruguay Round negotiations to address all the issues relating to intellectual property rights together.

The United States proposal referred to a minimum term of patent protection of twenty years from filing or seventeen from grant, while the Japanese referred to a term of fifteen years. These differences created problems during the course of the negotiations but because of the interference by commercial groups of these countries, the differences were eventually resolved among these countries.[101] The involvement of non-state and their successful effort in overcoming differences between their governments was an essential feature of TRIPs agreement. During the entire course of negotiations commercial lobbies from developed countries

[101] Susan Sell, *Power and Ideas: North-South Politics of Intellectual Property and Antitrust*, 1998, p.87 & 88

played a highly influential role illustrating the significant role of these organizations in contemporary globalization.

The lobbying efforts by the pharmaceutical industry, and particularly those of the US-based multinational pharmaceutical giants, significantly affected the course of the multilateral negotiations on intellectual property, specifically those relating to patent, during the Uruguay Round of the GATT (1986-1994). The Intellectual Property Committee (IPC), founded in March 1986 and dominated by the US research-based industry closely coordinated industry positions with that of the US government throughout the Uruguay Round Negotiations.[102] Gradually as the negotiations progressed, the interests of pharmaceutical companies were largely incorporated into the final text of the TRIPs agreement and those of the developing countries were dismissed.[103] During this phase close collaboration developed between the US Intellectual Property Committee, the Union of Industrial and Employers' Confederation of Europe and the Japanese Keidanren. The national industries of these countries provided technical and legal expertise to negotiators of developed countries based on years of experience in international intellectual property protection. These information and advice gave a powerful position to developed countries while negotiating the agreement. The commercial groups were not only responsible for the launch of Uruguay Round negotiations by initiating the groundwork and lobbying with their governments for better intellectual property rights but they also played an imperative role in arranging

[102] Its prominent members at that time were IBM and Pfizer. Its current members are General Electric, Johnson&Johnson and Time Warner. From its very inception the IPC worked closely with the developed country negotiators as well as with the GATT and WIPO Secretariats and intervened at critical points to ensure that its views were taken into account in the final results.

[103] Mohamed Omar Gad, "Top-Down Rule-Making: Negotiating the TRIPs Pharmaceutical-Related Patent Provisions", *Essays in International Financial & Economic Law*, No. 45, (London: The London Institute of International banking, Finance and Development Law ltd, 2003), p.5.

meetings between the government officials of their countries outside the negotiating table, so that these differences were sidelined and a consensus could be reached. These activities of the commercial lobbies decided the course of Uruguay Round negotiations in their favour.

Other developments needs to be mentioned which as they had an impact on the TRIPs negotiations and the direction that the negotiation took after 1989. Dramatic transformations took place in the broader global political and economic order. Between the Uruguay Round mid-term agreement of April 1989 and the Brussels ministerial meeting in December 1990, the communist government in East Germany together with the Berlin wall were swept away and this was followed by unified German elections. Communist regimes elsewhere in East Europe collapsed and were replaced by democratically elected governments committed to capitalist economic reforms. The principles of free trade and market oriented prices which were the core elements of the GATT thinking became the mainstream thinking of economic reform almost everywhere. The dramatic end of the cold war in Europe added a new dimension to the multilateral agreements. This rapid course of events within Europe engulfed the community decision-making apparatus in frantic activity. There were a number of regional linkages formed which included strengthening of the European Union, the East Asian regional cooperation, the Asia-Pacific Cooperation and the Americas initiative for regional cooperation. In a way these developments made it easier to push the Uruguay Round agenda and the TRIPs agreement but they also meant that all the regional groups had different regional and bilateral objectives which needed to be addressed within the Uruguay Round.

There was impressive progress made in the TRIPs negotiations from July 1989 to December 1990. Developing countries had agreed to most of the provisions leaving open only the question of whether the agreement would be lodged in GATT or WIPO. Written submissions were made by many countries regarding their preferences in a multilateral trade agreement on intellectual property rights. Korea, Peru, and Brazil made their written submissions arguing for a balance between rights and obligations of intellectual property rights owners. The Peruvian submission called for a balance in the results of the Uruguay Round and demonstrated its willingness to agree to most of the developed countries arguments. Similarly, Korea also agreed with most of the developed countries submissions. In March 1990 the European Community tabled a draft agreement on TRIPs covering standards, principles, and enforcement issues. This was followed by similar texts from US, Japan and Switzerland. A significant development in the second half of 1990 was the move towards consensus on a successor organization to GATT that would incorporate the results of Uruguay Round negotiations. It was initially decided that Multilateral Trade Organization was the one to replace GATT and during the negotiations it was made clear that countries could either choose to accept or reject the entire package of results. Although the acceptance of this provision was open and not mandatory it involved the larger issue of membership in the multilateral trading system itself which no country could afford to lose. Therefore all the countries accepted the Multilateral Trade Organization which later on came to be known as the World Trade Organization and this effectively ended the debate on the earlier demand of the developing countries to make Intellectual property rights as part of WIPO and not GATT.

The next stage of negotiations was held in December 1990 at Brussels where provisions on patents, scope of protection for computer programmes under copyright, some aspects of lay-out designs, trade secrets, anti-competitive practices, dispute settlement, and transitional arrangements were some of the issues that were discussed. The developing countries in this round hardly put a debate to the issue of extending the patent term of all existing patents and in the final agreement the patent term was settled for twenty years.

The bargaining for transition periods by the developing countries proved to be the most difficult one. The US was unhappy with the long transition periods of 5, 10, and even 15 years which were proposed by the developing countries. The United States argued that developing countries would effectively get a ten-year transition period on pharmaceutical and agricultural chemical patents. This proposal was along the line of bilateral agreement which the US had reached with Korea in 1986 and Mexico in 1990. Finally in the Dunkel Draft all members were given one year form the entry into force of the WTO and TRIPs, to implement its provisions. The developing countries from 1996 onwards have had to implement the intellectual property rights provisions equally for foreigners and nationals within TRIPs from 1996. It was also decided that all the other provisions of TRIPs can be delayed by developing countries up to January 2000 and product patents for technologies can be delayed till 2005.

The final Dunkel draft much to the satisfaction of the US pharmaceutical lobbies and in the words of Pfizer's Senior Vice-President:

The Dunkel Text on TRIPs goes a long way in providing the type of international intellectual property protection that the Intellectual Property Committee (IPC), three successive administrations and the US Congress have been seeking together in the GATT for over the last seven years. As a general rule, the text contains high standards of protection and enforcement, has a multilateral dispute resolution mechanism, and limits many of the exceptions and derogations from the standards of protection that had been a concern for the IPC.[104] *The role played by the industrial lobbies in TRIPs negotiations reveals that in international politics it is often the possession and use of "effective authority", which works in favour of a particular section of the international community.*

The developing countries based on the Uruguay Round started revising their intellectual property right laws within their countries during the course of the negotiation or soon after the end of the negotiations. Irrespective of such changes made by the developing countries they came under the priority watch list of US and trade sanctions were imposed on them. This was particularly true of India and Brazil, whom the US brought under its 'Top Priority Watch List'. Many of the developing countries continue to phase the developed countries close scrutiny in the amendment and implementation of their intellectual property right laws. India came outside the realm of US priority watch only after the Uruguay Round and this change was attributed to the progress made in amending the copyright law,

[104] Ibid. p.63 & 64.

removing entry barriers to Hollywood films and India's agreement to hold bilateral consultation to the implementation of TRIPs.

The finishing touches to the Uruguay Round and TRIPs agreement were given in December 1993. The final stages of the negotiating process was witnessed by vigorous bargaining between US and the European union and it seemed that the negotiation process involved just these two countries and the others were merely spectators. There were very minor changes done form what was agreed upon at the Dunkel Draft and the December 1993 text was formally adopted at Marrakesh, Morocco in April 1994 and the fact remains that despite participation from most of the developing countries during the TRIPs negotiation, the final agreement did not much reflect their opinion and the proposals laid down by them during the period of negotiation. The public reactions to the TRIPs agreement was supportive in the developed countries and was one of relief as the negotiations came to an end after a long period of 6 years and particularly for the US and European Union, they were able to put aside their differences and reach an accord. But the reaction of the press in the developing countries was particularly critical of the TRIPs agreement. *The Times of India* reported the negotiations as one of the most controversial agreements because of the intransigence of the developed countries, especially the United States and the European community and the selfish manner in which they had defended their interests at the cost of the developing world. However, it also stated that despite this regrettable lack of balance in the final outcome, it is extremely important for India to remain a part of the multilateral trading system.

An Assessment of the TRIPs Negotiations

The TRIPs negotiations was definitely not a democratic agreement arrived at by sovereign states. The first condition for the democratic conclusion of the treaty would have been the representation of the interests of the developing countries which was certainly not fulfilled during the TRIPs negotiations. On the face of it this condition seems to have been fulfilled in the negotiation process as the representatives of the key developing countries were present but the fact that GATT was chosen as the forum to initiate these talks, where the developing countries did not have much say, proves that exclusion or marginalization of these countries was deliberated.

The developing countries did not play any significant role in the groups that were formed outside the negotiation process where most of the decisions were taken. It was the US, Europe and Japan group which was the most active and played a very influential role in the final text of the TRIPs agreement. The US and Europe were a part of virtually all the groups that were formed during the negotiation period and therefore had full information with regard to the consequences of the various TRIPs provisions. Whenever the US and the European Union wanted higher levels of secrecy, they formed a small negotiating group. Therefore it is difficult to defend that TRIPs negotiation was a model of transparency. In this context the developing countries were again the least informed and their governments did not have a full idea of the likely effects of the TRIPs agreement. As the negotiations progressed the developing countries came to feel that they were wasting their time in the TRIPs negotiations.

The most problematic part of the TRIPs negotiations was the application of coercive power by the developed countries, particularly by the US in the form of 'Special 301'. Though the basis for the TRIPs was termed as an attempt to bring about a multilateral agreement for free and fair trade among sovereign nations, the use of bilateral and unilateral means to make the developing countries agree to the provisions of TRIPs makes the agreement a case for the exercise of power at the international level where the changing patterns of globalization aided the developing countries in their goal. The greater dependency of the developing countries on the developed countries with the implementation on large scale market reforms in most of these countries made them more vulnerable to the US 301. As mentioned earlier the attractive package of FDI was another reason why most of the developing countries went on to agree to the TRIPs provisions.

Once the negotiating mandate was set at Punta Del Este developing countries' negotiators had the choice of either obstructing the TRIPs negotiations and preventing consensus over it or engaging constructively to get the best possible result. Though at the initial stages the developing countries decided to obstruct the negotiation process, they could not sustain it because of the unilateral pressure applied by developed countries over them. The developing countries also lacked the professional negotiating skills and could not make use of the differences among the developed countries particularly with respect to the US and the European Community. Unlike some developed countries most developing countries did not develop adequate mechanisms for consulting with civil society and business interest groups during the negotiating process, leading to subsequent difficulties in TRIPs implementation. The United States among all the other

countries clearly had a powerful weapon in tackling the issue of international intellectual property protection. This weapon, put to effective use by the US international business sector, was notorious in being unilateralist and coercive.

The TRIPs negotiations could be termed as three track negotiation process where the multilateral framework of commitments was pursued in the Uruguay Round while the United States, under Special Section 301 and pressed the case of intellectual property rights bilaterally with certain East Asian Countries. At the regional level countries like Mexico, as part of NAFTA, adopted laws for the adoption of intellectual property rights.[105]

Power was exercised through direct and indirect mechanisms during TRIPs negotiations. Therefore the final agreement that was reached was not to the satisfaction of developing countries as they had to make significant compromises, which they might not have otherwise done. Developing countries had a number of disadvantages while entering TRIPs negotiations. Many of the Least Developed Countries did not have much idea as far as trade and intellectual property rights were concerned. This was one of the major drawbacks, which restricted developing countries from directing a united challenge during the negotiations. Most of the problems in implementing TRIPs provisions are because of existing differences between developed and developing countries in their approach to intellectual property rights and also in benefits from the present system. The challenges arising from the implementation of TRIPs can be successfully overcome only when there is an understanding of the issues related to creative

[105] Ernest H. Preeg, *Traders In a Brave New World: The Uruguay Round and the Future of International Trading System*, 1995, p.212.

knowledge in developing countries. Any compromised or forced entry into an agreement is not going to beneficial for the developing countries and would further complicate the problem.

CHAPTER IV

TRIPs: Implications for Traditional Communities

The implementation of Trade Related Intellectual Property Rights in developing countries has grave implications for the local communities and their knowledge systems. This chapter aims to discuss at elaborate length the impact of TRIPs on the local communities. It is essential to address the impact of TRIPs on local communities not only for economic purposes but also to understand the power relationships between the scientific knowledge systems and local knowledge systems. The Uruguay Round of negotiations failed to address the concerns of the local communities and it was not an important issue as far as the initial stages of the Uruguay Round negotiations were concerned. But after the formation of WTO and implementation of TRIPs agreement, the fallacies of the agreement and its negative impact on local communities became apparent and therefore Traditional Knowledge has become an important issue at the WTO.

In June 1995, just after the formation of WTO and the conclusion of TRIPs agreement, the concerns of the local communities came up in a meeting of the Committee on Trade and Environment.[106] In the meeting the Nigerian delegate argued that TRIPs must be constructed to "accord recognition to traditional interest and right holders." It was also argued in the meeting that the worst casualty, in an IPR regime for plant varieties, was the knowledge innovations and practices of

[106] Graham Dutfield, "TRIPs-Related Aspects of Traditional Knowledge", *Case Western Journal of International Law*, Vol. 33, No. 2, 2001, p.269

indigenous and local communities embodying traditional lifestyles relevant for the sustainable use of biodiversity.[107]

The implementation of the TRIPs agreement has further complicated the conservation of the local communities and the knowledge systems possessed by them. There has been a widespread failure to respect the basic rights of the local communities and a tendency to exploit their knowledge to gain profits and TRIPs has been instrumental in this exploitation. It is essential to understand the meaning of traditional knowledge and its role in conservation of biodiversity in developing countries before discussing the impact of TRIPs on these communities.

Traditional Knowledge and Biodiversity in Developing Countries

Traditional Knowledge is local knowledge that is unique to a given culture and society. It is different from the international knowledge system generated by universities, research institutes, and private firms. It is the basis for local-level decision making in agriculture, health care, food preparation, education, natural resource management and a host of other activities in rural communities. Such knowledge is passed on from generation to generation, in many societies by word of mouth.[108] Traditional Knowledge can be considered to include knowledge of plants and animals and their properties; minerals and soils and their properties; combination of organic and inorganic matters; processes and technologies; means

[107] Ibid.
[108] Arun Agrawal, *Development and Change*, 1995, p.416.

of enhancing individual health and welfare; means of enhancing collective heath and welfare and artistic expressions.[109]

A range of differences have been made between traditional knowledge and scientific knowledge. They have most often been distinguished on the basis of their efficiency and the method of practice. But the most important difference between traditional knowledge and scientific knowledge is that traditional or local knowledge is closely connected to the environment in which it functions and the preservation and growth of this environment is essential for the local communities who practice this knowledge. The local communities owe their knowledge to their culture and religion. The principle of exclusivity is used in local knowledge systems as well but it differs from the way the scientific knowledge systems view exclusive rights to own creative knowledge. Access to certain kinds of knowledge is, in fact, severely restricted by local communities as it may be obtained only by favour of some supernatural power or agency rather than by individual effort. A typical example would be the knowledge obtained by a shaman in the course of a trance which he then uses for certain purposes such as divination and healing.[110]

Though there are differences between the local and scientific knowledge systems, yet they are not completely demarcated and both systems of knowledge have been in constant contact with each other. The traditional knowledge systems had often

[109] Bernard O'Connor, "Protecting Traditional Knowledge: An Overview of a Developing Area of Intellectual Property Law", *The Journal of World Intellectual Property*, Vol. 6, No. 5, September 2003, p.678. Also see, Daniel Gervais, "TRIPs, Doha and Traditional Knowledge", *The Journal of World Intellectual Property*, Vol. 6, No. 3, May 2003, p.404.
[110] T. N. Madan, "Sacred Persona" in T.N.Madan (ed.), *Religion in India*, (New Delhi: Oxford University Press, 1991), p.261.

been branded as derogatory, especially in the 1950s and 1960s when scientific knowledge was progressing on the basis of objective and causational research. But, over the years the failure of the scientific knowledge systems to answer many of the development strategies has made them turn to the local knowledge systems. A sudden realization also came about that the local knowledge and communities practicing them are disappearing all over the world as a direct result of the pressures of modernization. In order to preserve the knowledge of these communities there have been suggestions made which again constitute the western thinking and western means of preserving local knowledge. These means of preserving the local knowledge are usually not with an understanding of the relationship that the local communities share with their knowledge systems. The western scientific knowledge systems are more interested in using the biodiversity available mostly in the developing countries primarily to enhance their own western scientific system. Before the advent of biotechnology and genetic engineering, there was never really the need felt to protect genetic information and the knowledge of local communities.[111]

Traditional-local communities have over the centuries played a vital role in preserving the rich biodiversity encompassing the diversity of genes within species, of species within ecosystems, and of ecosystems -- coral reefs, prairies, forests, wetlands and so on -- within the biosphere of the developing countries, which now

[111] Thomas Cottier, "The Protection of Genetic Resources and Traditional Knowledge: Towards More Specific Rights and Obligations in World Trade Law," in Frederick Abbott, Thomas Cottier and Francis Gurry (ed.), *The International Intellectual Property Right System: Commentary and Materials*, 1999, p.1821.

the western sciences want to exploit for their own purposes.[112] There is a need to understand the importance of traditional knowledge in the development of modern plant breeding and in the discovery of the valuable genes and traits of the various species of crops and plants.[113] Traditional communities have developed complex systems of pest management and biological control and this work is no less than the scientific experimentation conducted by scientists in the agricultural research stations or laboratories. The role of local knowledge in the realm of medicinal plants is even more obvious than in the case of crop varieties. This technology of use has been acquired through a few thousand years of experience, trial and error, and incremental refinement.[114] The biological resources or the biodiversity that have been over the centuries preserved by local communities are the treasure of developing countries. Developing countries are the source of 90% of world's biological resources. India is one of the world's top twelve mega diversity countries and twenty five percent of biological resources are owned by South Africa.[115] 33% of the flowering plants and 18% of all plants are found in India. At least 166 varieties of crops and 50, 000 to 60, 000 varieties of rice are found in India. Most of the Latin American countries are also very rich in biological resources. Again, the primary reason for the existence of a rich variety of biological resources in these countries can be attributed to the knowledge systems of traditional communities. The traditional communities have developed their own knowledge base about the

[112] Clifford S. Russell, "Two Propositions About Biodiversity", *Vanderbilt Journal of Transnational Law*, Vol. 28, No.4, 1995, p.690.
[113] Suman Sahai, "Importance of Indigenous Knowledge in IPR System", 1996, p.3043.
[114] Ibid.
[115] Madhav Gadgil and P R Seshagiri Rao, "A System of Positive Incentives to Conserve Biodiversity," *Economic and Political Weekly*, Vol. 29 No. 32, 6 August 1994, p.2103. Also see Asif, Mohammed, "Intellectual Property Rights and Biopiracy: Their Implications for Tribal Medicinal Traditions", *Social Action*, Vol. 48, October-December 1998, p.375.

flora, fauna and mineral wealth of their region and use this knowledge to their socio-economic advantage.

The commercialization of the knowledge resources of local communities have left them at a disadvantageous position. The commercialization of the medicinal values of turmeric or neem has in no way benefited local communities and instead their knowledge have been further exploited without even giving due credit to them by the scientific communities and multinational companies which have now turned to bio-friendly products. The issue is not simply of monetary losses for local communities but more significantly patenting of a particular product by a multinational within the ambit of TRIPs deprives local communities from using the product which they had been producing for centuries as a means of existence. For local communities their knowledge is based on a social context and encroachment upon that knowledge has violated their social space. There are a number of differences among local communities on the question of the use of their knowledge for commercial purposes by the multinational companies. These differences would become clearer when the different cases of exploitation of their knowledge would be discussed.

Biotechnology has accentuated the use of biological resources of developing countries by the pharmaceutical and fertilizer based multinationals having easy access to the biological and genetic resources of these countries. This gives them the opportunity to access the knowledge of local communities and exploit such knowledge for their own purposes. Many pharmaceutical companies develop new

drugs with the help of the knowledge and resources that they derive from local communities.[116] These drugs are then patented by pharmaceutical companies with the claim that they are new inventions and therefore any further use of these drugs or the processes of their development should be accessed by others by paying a royalty to the company which has produced them. But, the claim made by these companies of their knowledge of these drugs being a "new" invention is debatable as knowledge of these drugs was in reality derived from local communities. Therefore what claims do the pharmaceutical companies have over the drugs produced from the knowledge of local communities?

In this regard it is important to mention the Convention on Biodiversity and the circumstances under which the Convention was signed to understand the international community's stand on the issue of protection of biodiversity and knowledge of local communities.

The Convention on Biodiversity

Since the middle of the 1980s it was increasingly realized that biodiversity is a great possession and the pattern of development has led to the extinction of many of the species of flaura and fauna. Moreover, local knowledge systems revealed the importance of biodiversity conservation and steps began to be taken in this direction.[117] The international debates with regard to the conservation on biodiversity revealed that the pattern of development followed by developed

[116] Madhulika Banerjee, "Local knowledge for World Market: Globalizing Ayurveda," *Economic and Political Weekly*", Vol. 39, No. 1, 3 January 2004, p.90.
[117] G. Kristin Rosendal, *The Convention on Biological Diversity and Developing Countries* (Dordrechet: Kluwer Academic Publishers, 2000), p.68.

countries has deteriorated biodiversity at a global level and the importance of local communities and their knowledge systems was accepted.

The Convention on Biodiversity (CBD), which was signed in Rio de Janeiro (Brazil) in June 1992 was an attempt to balance the interests of the North and the South on a global level and involved a general commitment to the conservation and sustainable use of biodiversity. The CBD recognized the intrinsic value of biological diversity and the sovereign states over their biological resources.[118] The CBD was held under the United Nations Conference on Environment and Development (UNCED) and it entered into force from 24 December 1993 after 30 countries ratified it. The CBD currently has 168 signatories and United States, which signed the CBD in 1993 had not ratified it till December 2002.[119] One of the aims of CBD was an analysis of the impact of intellectual property rights systems on the conservation and sustainable use of biological resources. The CBD also recognizes the value of knowledge possessed by local-traditional communities and states that any attempt to commodify and commercialize the indigenous knowledge should include the process of profit or benefit sharing with these communities. For the developed countries to continue to have access to the developing world's biological diversity, the Convention calls the a) active support for conservation efforts, b) equitable compensation to the source country[120] and its indigenous population, c) technology transfer to the source country, and d) support for

[118] Ashish Kothari and R V Anuradaha, "Biodiversity, Intellectual Property Rights, and GATT Agreement: How to Address the Conflicts?", *Economic and Political Weekly*, Vol. 32, No. 43, 25 October 1997, p.2815.
[119] James Stamps, "Trade in Biotechnology Food Products", *International Economic Review*, November-December 2002, p.11.
[120] The term "Source Country" refers to countries of the South that are sources of biological material for multinational pharmaceutical corporations based in countries of the North.

capacity-building within the source country.[121] The CBD is perhaps an innovative attempt to preserve the biological resources and more importantly recognizes the importance of traditional communities in preserving biological diversity. The CBD entered into force in 1992 but its application and interpretation is still a matter of controversy. But, the concept of benefit sharing or profit sharing which the CBD convention states for all practical purposes is not attractive and would be illustrated later in the chapter by referring to the cases of violation of the rights of local communities. The CBD prescribes certain basic principles, for example, that countries have control over the biological resources within their own territories.[122] The Convention is a visible admission by the international community that historically the North has exploited the South's resources without providing adequate compensation, usually with the source country's consent.[123] The Convention in its Article 16, 5 specifically asserts that intellectual property rights must not be in conflict with conservation and sustainable use of bio-diversity, a provision that has totally ignored by those who composed the TRIPs agreement.[124] However, the CBD leaves open issues regarding how biological resources should be protected including how this protection is to be paid for and how income generated from the exploitation of biological resources will be allocated. The Convention requires that countries gathering genetic resources must do so on "mutually agreed terms" by obtaining "prior informed consent." At first glance this gives the

[121] Edgar J. Asebey and Jill D. Kempenaar, "Biodiversity Prospecting: Fulfilling the Mandate of the Biodiversity Convention", *Vanderbilt Journal of Transnational Law*, Vol. 28, No.4, 1995, p.704.
[122] Thomas Cottier, "The Protection of Genetic Resources and Traditional Knowledge: Towards More Specific Rights and Obligations in World Trade Law," in Frederick Abbott, Thomas Cottier and Francis Gurry (ed.), *The International Intellectual Property Right System: Commentary and Materials*, 1999, p.1849.
[123] Edgar J. Asebey and Jill D. Kempenaar, "Biodiversity Prospecting: Fulfilling the Mandate of the Biodiversity Convention", 1995, p.710.
[124] Biplab Dasgupta, "Patent Lies and Latent Danger: A Study of the Political Economy of Patent in India", *Economic and Political Weekly*, April 7-24, Vol. 34, No. 16 and 17, 1999, p.981.

impression that the Convention is in favour of the developing countries and the local communities whose resources are often used by private companies but in reality the mutually agreed terms of the agreement is subject to wide interpretation and often does not benefit local communities. The Convention also requires buyers of the genetic and biological resources to arrange "fair sharing" of the benefits they derive from the resources but the Convention does not provide any guidance on the criteria for fairness. As a result of these loopholes local communities are left with minor compensations when compared to the benefits the private companies accrue from using the knowledge resources of these communities.

TRIPs and local Communities

The TRIPs agreement and the present intellectual property rights structure within this agreement reduces relevance and possibilities for positive implementation of the CBD. There are a number of problems and conflicts that arise with the implementation of TRIPs from the point of view of traditional communities and the conservation of biological diversity. The contradiction between CBD and TRIPs emerges from the fact that the former believes in conservation of biodiversity for sustaining life and the latter prescribes standardized format for the patenting of life forms. The intellectual property rights harmonized under TRIPs does not recognize local community innovation. The notion of private system of patenting is an alien concept for the indigenous communities as for most of them knowledge is communally owned and not meant to be shared. TRIPs does not recognize the notion of claiming collective ownership of intellectual property rights. The TRIPs agreement also does not state anything on the issue of sharing of benefits with

traditional-local communities.[125] Therefore the question that automatically arises is that can a country challenge another country on the ground that it fails to give adequate protection to the informal innovation of local communities and is thus in violation of Article 8 (j) of the CBD? Even if the developing countries have protested against the exploitation of biological resources by the developed countries, it has not been under the CBD. The growth in biotechnology has meant a greater exploitation of the knowledge of the local communities and TRIPs has facilitated the private firms as it does not recognize the right of the local communities. Moreover, even if TRIPs recognizes the right of the local communities in the future, how does the agreement intend to protect the rights of these communities? It is clear the rights of local communities cannot be protected under TRIPs mainly because the evolution of TRIPs as seen earlier is the result of the need to protect individual creative knowledge. This has not only burdened the indigenous communities economically but also in terms of their tradition and culture.

Perhaps the most affected local communities because of biopiracy are the farming communities. The farming communities in developing countries are the actual breeders of the crops and the scientific laboratories have gained immense benefits from these communities. The product patents within the TRIPs allows the multinational firms to claim patents on crop varieties which are being grown in developing countries for centuries. The concept of Plant Variety or Breeders' rights which was institutionalized by the International Convention on the Protection of

[125] Ashish Kothari and R V Anuradha, "Biodiversity, Intellectual Property Rights, and GATT Agreement: How to Address the Conflicts?", 1997, p.2817.

New Varieties of Plants (UPOV) provides limited monopoly to a plants breeder over the reproductive material of the variety, that is control over the multiplication or sale of goods. Under TRIPs developing countries can choose to provide patents or develop a sui generic system to protect innovations in agriculture. They also have a third option of joining the Union International Pour la Protection Des Abstentions Vegetables, named after its French acronym UPOV.[126]

The farmers will have to pay royalty for saving and reusing seeds on their own farms under this new concept. TRIPs recognizes the provisions of UPOV which has allowed the multinational private forms to extensively patent plant varieties which the farmers in developing countries have been producing for decades, through their own knowledge of breeding and agriculture.

TRIPs also allows the patenting of life forms which allows further exploitation of the indigenous communities and their knowledge systems. Article 27.3b permits member countries to exclude patenting of plants, animals and 'essential biological processes', but makes it mandatory for them to patent microorganisms and 'microbiological processes. Moreover, members must patent plant varieties or otherwise protect them through an effective *Sui generis* system.[127] *Sui Generis* means something unique or distinct, but serves the same purpose. The patenting of life forms first started in the developed countries and does not come under the belief system of the local communities which was recognized by the patent laws of the

[126] N. Lalitha, "Intellectual Property Protection for Plant Varieties: Issues in Focus", *Economic and Political Weekly*, Vol. 39, No. 19, 8 May, 2004, p.1921.
[127] Martin Khor, "Indigenous Knowledge versus TRIPS and IPRs", *Indigenous Knowledge Monitor*, available at http://www.nuffic.nl/ciran/ikdm/8-3/column.html

developing countries. It was in 1971 in United States that for the first time the Supreme Court ruled that a genetically modified oil-eating microbe was not just a product of nature, but an "invention" and therefore could be patented. The US Patent and Trademark Office allowed in 1985 to patent the genetically-engineered plants, seeds and plants tissue to be patented and extended this ruling to animals in 1987. In Europe it was in September 1999 that the European Union accepted to register the rules of patents in living organisms. Thus the patenting of life forms which has now become a harmonized provision of intellectual property rights was not practiced by any developing country before TRIPs.

There have been ethical arguments given against the patenting of life forms. The primary question that is being asked is whether human beings as species have the right to claim private monopolistic right over any other species? The patenting of life forms commercializes them and this is something that the local communities do not believe as part of their culture and tradition.

There are a number of contradictions within the TRIPs agreement itself. The agreement requires that an invention be "new". Considering this, should a national court in a developing country refuse to enforce a patent for a particular drug for malaria, holding that it is not "new," since traditional native doctors have historically used the components of the drug in more rudimentary forms prior to its "discovery" by a modern patentee?[128] There can be a wide interpretation of the requirement of an invention to be "new" for claiming patents within the TRIPs

[128] Ruth L. Gana, , "Prospects for Developing Countries Under the TRIPS Agreement", 1995, p.749.

agreement. The agreement does not give clarification for the word "new." Therefore this has come into conflict with the interests of the traditional communities in developing countries and especially when documentation of the traditional medicines is under process. For example, the most effective treatment for post-therapeutic neuralgia is hot pepper,[129] and the cream capsaicin was developed as a result of the observations of the use of hot pepper by South American local tribes. Piolcarpine, used to treat glaucoma, was first utilized by traditional communities in Brazil. The TRIPs Agreement neither grants rights to reflect these forms of contribution to inventiveness, nor does it provide a framework for the allocation of rights between the local communities and the use of this knowledge to develop drugs which are patented under modern patent laws.

Cases of Biopiracy of the Knowledge of Local Communities

As argued earlier, any attempt to violate the rights of local communities is being done systematically and with the thorough knowledge of the role played by them in protecting their biological resources and also with the awareness that these communities depend on the biological resources for their livelihood and are attached to them for their survival. Therefore it is the exercise of oppressive power on the indigenous communities which is being institutionalized with the agreement on TRIPs. These cases are all of different ways in which the rights of the local communities have been exploited by the pharmaceutical companies, sometimes with the consent of these communities and in some cases the consent is not taken. There a couple of cases where the private companies have reached an agreement

[129] See William A Check, "Hot Pepper as Medicine: Modern Science Makes Use of an American Pain Reliever", *Los Angeles Times*, 30 October, 1989, at p.B3.

with the native communities to compensate them in return for their knowledge and resources. There are number of differences in the way local communities view the use of these resources by the individual companies and they also differ on the issue of compensation.

I. Neem or *Azadirchta Indica* has acquired relevance due to its medicinal properties and the local communities have in India long been using it for its medicinal properties. Some of the Indian research Institutes like Indian Agricultural Research Institute and the Malaria Research Centre have been working on the medicinal properties of neem. There are a number of neem based products produced in the market and in the middle of 1990s the US based company W R Grace and Co. patented a pesticide made from the neem seeds. The pesticide is based on an extraction process widely known to the Indian farmers.[130] The justification given by W R Grace is based on the claim that these modernized extraction processes which constitute genuine innovation and have an element of novelty. Though, there has been a lot of discontent and protest made in India regarding the patenting of neem products by foreign firms, yet they continue to be a feature of the intellectual property rights system and are a threat to the local communities. The patenting of this particular pesticide was opposed by a US based group representing a coalition of critics and it described the

[130] "Seeds of Conflict", *Time Magazine*, 25 September 1995, p.67

patent as an example of "genetic colonialism" and filed a petition to have the patent revoked.

Individual private companies like W R Grace and Co. might be involved in the research of the products made out of Neem but the question is whether they can do this kind of research without paying any royalty to the communities which have been experimenting on Neem and its advantages fro centuries? With TRIPs the patenting is now on products, which makes the patent claim of W R Grace all the more questionable. If patent is on a product then the same product cannot be extracted through a different process and marketed. This logic was given by the developed countries during the TRIPs negotiations to ensure that developing countries do not make profits on drugs that were originally produced in the developed countries. The same logic can be applied here by saying that W R Grace cannot patent a pesticide which has been widely used by Indian farmers even though it has been extracted by a different process.

II. *Maytenus Buchanni* is available in the Shimba Hills of Kenya and is used by the local communities called Digo, who have used the plant to treat cancerous conditions for many years. The National Cancer Institute of the United States invested in extensive collection of this plant from the Shimba Hills of Kenya. More than 27.2 tons of the plant from a game reserve in the Shimba Hills for testing under a major screening programme. The plant yields maytansine, which was considered a

potential treatment for the pancreatic cancer. All the material collected was traded without the consent of the Digo community, neither was their any sufficient recognition of their knowledge of the plant and its medicinal properties. Under the CBD the extraction of the natural resources by any country should be after an agreement with the source country and compensation should be provided to the local communities. In this case the compensation was not provided and neither was there any recognition of the knowledge of the local communities.

III. *Homanlanthus Nutans* were also taken by NCI from the Samoan rainforests. The plant contains the anti-HIV compound prostratin. The collection was undertaken on the basis of traditional knowledge. In this case also the traditional communities' knowledge was exploited and no recognition was given to these communities. More importantly these plants are a part of the livelihood of these communities and large scale collection of these plants can only threaten the existence of them. This can be a real danger for the indigenous communities of the Samoan rainforests. Cases I and II reveal a violation of the CBD convention and most of the communities in these areas are not in favour of compensation. The problem that they face is also connected to the threat to the environment, which is intrinsically connected to their knowledge. The access of this environment by National Cancer Institute would deplete this environment and these communities are becoming increasingly aware of this.

IV. *Trichopus Zeylanicus Travancoricus* is used by the Kanis in the Agasthyamalai hills of the Western Ghats in the Tiruvananthapuram District of Kerala. The scientists of Tropical Botanical Garden and Research Institute (TBGRI), a centre for plant research and development set up by the government of Kerala, investigated the fruit of the plant with the help of the Kanis and developed a drug called 'Jeevani' from the same. They then resolved to share 50 per cent of any commercial returns that they get from the drug with the Kanis. But practical implementation of such arrangements is often not beneficial for the indigenous communities and it was evident in the case of Kanis.

Though, the CBD provision mandates the contracting parties to respect, preserve, and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation of biological diversity, yet practical implementation of such provisions does not take place. TBGRI has been sharing its benefit with Kanis of one particular Panchayat and trying to give quality life to the Kanis. But, the Kanis of other Panchayats are not very appreciative of TBGRI's work and feel that commercialization of their knowledge is not going to lead them anywhere. Moreover, there is an intimate relationship that local communities with their environment and commercialization of their knowledge can only complicate this

relationship. The entering of scientific communities into the realm of local communities can create further problems for these communities.

This case demonstrates the differences that are prevalent within the local communities to the question of compensation. Moreover, companies often have these compensation agreements with one group of a particular community and this does not necessarily lead to all the different groups who use the same knowledge of being compensated. This amounts to dissatisfaction among the groups who are not compensated. The differences among the local communities make the situation more complicated as far as TRIPs and the local communities are concerned. This particular case also makes it clear that protection of the rights of local communities cannot be done by following a single pattern as these communities and their concerns are also not always similar.

V. For generations, shamans of indigenous tribes throughout the Amazon Basin have processed the bark of *Banisteriopsis Caapi* to produce a ceremonial drink known as "*ayahuasca*". The shamans use *ayahuasca* (which means "vine of the soul") in religious and healing ceremonies to diagnose and treat illnesses, meet with spirits, and divine the future. An American, Loren Miller obtained US Plant Patent 5,751 in June 1986, granting him rights over an alleged variety of *B. Caapi* he had called "Da Vine". The patent description stated that the "plant was discovered

growing in a domestic garden in the Amazon rain-forest of South America." The patentee claimed that Da Vine represented a new and distinct variety of B. caapi, primarily because of the flower colour.

The Coordinating Body of Indigenous Organizations of the Amazon Basin (COICA) – an umbrella organization representing over 400 traditional and indigenous groups – learned of the patent in 1994. On their behalf the Center for International Environmental Law (CIEL) filed a re-examination request on the patent. CIEL protested that a review of the prior art revealed that Da Vine was neither new nor distinct. They also argued that the granting of the patent would be contrary to the public and morality aspects of the Patent Act because of the sacred nature of Banisteriopsis caapi throughout the Amazon region.

Extensive, new prior art was presented by CIEL, and in November 1999, the USPTO rejected the patent claim agreeing that Da Vine was not distinguishable from the prior art presented by CIEL and therefore the patent should never have been issued. However, further arguments by the patentee persuaded the USPTO to reverse its decision and announce in early 2001 that the patent should stand. This case is one among the few where the local communities are aware enough to fight against the violation of their rights by individuals and private firms. But, in this case the argument made on behalf of the local communities to reverse the

patent granted was related to the cultural and religious significance of *ayahuasca* for the shamans.

VI. The San, who live around the Kalahari Desert in southern Africa, have traditionally eaten the *Hoodia Cactus* to overcome their hunger and thirst on long hunting trips. In 1937, a Dutch anthropologist studying the San noted this use of *Hoodia*. Scientists at the South African Council for Scientific and Industrial Research (CSIR) only recently found his report and began studying the plant. In 1995 CSIR patented *Hoodia's* appetite-suppressing element (P57). In 1997 they licensed P57 to the UK biotech company, Phytopharm. In 1998, the pharmaceutical company Pfizer acquired the rights to develop and market P57 as a potential slimming drug and cure for obesity (a market worth more than £6 billion), from Phytopharm for up to $32 million in royalty and milestone payments.

On hearing of possible exploitation of their traditional knowledge, the San People threatened legal action against the CSIR on grounds of "biopiracy." They claimed that their traditional knowledge had been stolen, and CSIR had failed to comply with the rules of the Convention on Biodiversity, which requires the prior informed consent of all stakeholders, including the original discoverers and users. Phytopharm had conducted extensive enquiries but were unable to find any of the "knowledge holders". The remaining San were apparently at the time

living in a tented camp 1500 miles from their tribal lands. The CSIR claimed they had planned to inform the San of the research and share the benefits, but first wanted to make sure the drug proved successful. In March 2002, an understanding was reached between the CSIR and the San whereby the San, recognized as the custodians of traditional knowledge associated with the *Hoodia* plant, will receive a share of any future royalties. Although the San are likely to receive only a very small percentage of eventual sales, the potential size of the market means that the sum involved could still be substantial. The drug is unlikely to reach the market before 2006, and may yet fail as it progresses through clinical trials.

The case of San tribes is similar to that of the Kanis and though benefit sharing can be a way of acknowledging the worth of the local communities, yet it is not certain that these communities are going to be benefited out of them. The San tribes were able to reach an agreement with the CSIR and were even aware of the Convention on Biological Diversity which they believed the CSIR had violated. The African nations have lately managed to make associations comprising the traditional communities and they have their own structures to protect their knowledge and the environment within which they operate. Such consciousness has been a phenomenon among few groups within Africa itself. There are so many local communities, which still remain unexplored and are away from civilization and what provisions can be

adopted to protect the interests of such communities? This is something which is yet to be addressed by the governments of the developing countries.

VII. Turmeric (*Curcuma Longa*) is a plant of the ginger family yielding saffron-coloured rhizomes used as a spice for flavouring Indian cooking. It also has properties that make it an effective ingredient in medicines, cosmetics and as a colour dye. As a medicine, it is traditionally used to heal wounds and rashes. In 1995, two Indian nationals at the University of Mississippi Medical Centre were granted US patent no. 5,401,504 on "use of turmeric in wound healing".

The Indian Council of Scientific and Industrial Research (CSIR) requested the US Patent and Trademark Office (USPTO) to re-examine the patent. CSIR argued that turmeric has been used for thousands of years for healing wounds and rashes and therefore its medicinal use was not novel. Their claim was supported by documentary evidence of traditional knowledge, including an ancient Sanskrit text and a paper published in 1953 in the Journal of the Indian Medical Association.

Despite arguments by the patentees, the USPTO upheld the CSIR objections and revoked the patent. The turmeric case was a landmark case as it was the first time that a patent based on the traditional knowledge of a developing country was successfully challenged. The

legal costs incurred by India in this case have been calculated by the Indian Government to be about at US $10,000. The case of turmeric was a rare victory for the traditional communities and biopiracy of turmeric is not only done by the foreign multinational firms but also by cosmetic giants within India. When companies using Bio friendly products claim their products having various natural ingredients including turmeric, they most often do not acknowledge the knowledge of local communities in making the product.

VIII. Basmati is a variety of rice from Punjab provinces of India and Pakistan. The rice is a slender, aromatic long grain variety that originated in this region and is a major export crop for both countries. Annual basmati exports are worth about $300 million, and represent the livelihood of thousands of farmers. The "Battle for Basmati" started in 1997 when the US Rice breeding firm Rice Tech Inc. was awarded a patent (US5663484) relating to plants and seeds, seeking a monopoly over various rice lines including some having characteristics similar to Basmati.

Concerned about the potential effect of exports, India requested a re-examination of this patent in 2000. The patentee in response to this request withdrew a number of claims including those covering basmati rice variety. Further claims were also withdrawn following concerns raised by the USPTO. The dispute has however moved on form the

patent to the misuse of the name "Basmati." In some countries the term "Basmati" can be applied only to the long grain aromatic rice grown in India and Pakistan. Rice Tech also applied for registration of the trademark "Texmati" in the UK claiming that "Basmati" was a generic term. This was successfully opposed and UK has established a code of practice for marketing rice. The code states that "the belief in consumer, trade and scientific circles is that the distinctiveness of authentic Basmati rice can only be obtained from the northern regions of India and Pakistan due to the unique and complex combination of environment, soil, climate, agricultural practices and the genetics of the Basmati varieties." But in 1998 the US Rice Federation submitted that the term "Basmati" is generic and refers to a type of aromatic rice.

In response, a collective of US and Indian civil society organizations filed a petition seeking to prevent US-grown rice from being advertised with the word "Basmati". The US Department of Agriculture and the US Federal Trade Commission rejected it in May 2001. It deemed Basmati a generic term. The name Basmati can be protected by registering it as a Geographical Indication. The Indian and Pakistani government did not make rapid moves in preventing Rice Tech from taking on the term Basmati for their own rice variety. It was only when certain civil society organizations started protesting against the Rice Tech's claim that the government's of these countries took steps against the Rice Tech's claim to patent its rice variety. The farmers in India and Pakistan depend on

this rice as part of their daily life and the rice variety itself is a product of breeding by these farmers. It was fortunate that with the timely intervention of the civil society organizations and the governments of these countries any major damage to the farming communities producing Basmati was averted. Basmati case is an example of the violation of the rights of the farmers in the South Asian region who were producing this rice for centuries before Rice Tech's claim of "Texmati" being a novel invention. Basmati also reveals the commercial interests of the local communities, particularly those of the farmers coming under serious threat.

Basmati is a case which deals with the problem of geographical indication of the product under question. Within the TRIPs Agreement it is only wine and spirits, which are protected under geographical indicators and not other products like Alphanso mangoes, Darjeeling tea, Kohlapuri slippers, Bulgarian Yogurt, Czech Pilsen Beer and agricultural products of European Union.[131] There is an increasing demand to recognize these products also under geographical indicators in order to prevent the exploitation of the communities producing them by the multinational companies.

There are a range of issues which emerge as a result of the cases of biopiracy of the knowledge of the traditional communities. The primary issue is whether the

[131] Carlos M. Correa, "Review of the TRIPs Agreement: Fostering the Transfer of Technology to Developing Countries", *The Journal of World Intellectual Property*, Vol. 2, No. 6, November 1999, p.944.

multinationals in the first place have a right to claim patents for their inventions being novel or "new" when the knowledge of the invention and its use has been carried out by the local communities? Under the Convention on Biodiversity and particularly now with TRIPs, even if the private companies have the right to access the biodiversity and the knowledge of the local communities in developing countries, there this issue of prior consent and compensation. The compensation itself is a complicated subject as there doesn't seem to be an agreement among the communities themselves regarding compensation. Another important concern is the patenting of plant varieties and other agricultural products which has now become common after the advent of technology based agriculture and agricultural based research being conducted in research institutes and private laboratories. TRIPs allows the patenting of plant varieties as well which was not followed by most of the developing countries before TRIPs. In most of the developing countries where farmers are the breeders, what rights do these farming communities have in patenting their knowledge? TRIPs does not recognize farmers as breeders and in this regard the developing countries are faced with the problem of protecting the interests of the farming communities in their countries.

The cases of biopiracy illustrated above demonstrate the power that the private multinationals and research agencies have after the coming of TRIPs for patenting the products which they make out of the knowledge of local communities. Without the guidance of the local communities it is impossible for the multinationals to even know about the special qualities of a particular herb for making a drug or any other product. But in the first place the question that arises is whether the knowledge of

these communities should be used to make sophisticated drugs? The TRIPs agreement was made on patenting of life forms without even the prior knowledge to the thousands of traditional communities who could get affected by such a provision. In certain cases of biopiracy the local communities have been fortunate that patents have been taken back. But, this cannot be said of the several other cases where there has been a violation of the rights of the traditional communities. Agreements like TRIPs have institutionalized biopiracy of traditional knowledge and the CBD does not give much scope for the protection of the knowledge of these communities. In certain cases of this type of biopiracy it is not even known that an indigenous community has been practicing the knowledge of the product over which a patent is claimed on the basis of it being an innovation or a discovery. Registering of such patents does not allow the indigenous community to use the same product for their own use without paying a royalty to the patentee company. This is a case of complete exploitation where the indigenous communities are expected to pay a royalty for their own knowledge. The ideas of profit or benefit sharing which TRIPs does not even mention will probably not help in preserving the culture of the indigenous communities and attempts to commercialize their lives can be disastrous for the rich diversity of the developing countries as well as to the existence of the indigenous communities and their knowledge.

There are attempts being made in many of the developing countries to protect the interests of the traditional communities. The initiative taken by Shaman Pharmaceutical, Inc. to protect the traditional communities' interest along with making commercial utilization of the knowledge of these communities is worth

mentioning. The Shaman Pharmaceuticals was founded in 1989 with the goal of developing pharmaceutical using ethnobotanical knowledge.[132] Shamans screen plants known to be used by native peoples in at least three geographically distinct regions.[133] The approach of the Pharmaceutical Company is based on the premise that working with traditional healers is a more efficient method of identifying useful drugs than the industry practice of random screenings.[134] The company has also created a non-profit organization, The Healing Forest Conservatory, to channel future profits back into the source countries. However, the Healing Forest cannot garner significant help to the traditional communities unless the Shaman Pharmaceuticals gains profit from the drugs that it develops from the knowledge of the Local communities. Even without realizing profits, Shaman pharmaceutical claims to be investing twenty per cent of its budget on plant prospecting to assist the traditional communities which share the ethnobotanical knowledge. This seems to be a unique initiative taken by the Shaman pharmaceuticals and there is a genuine attempt to develop the native communities who are a part of the work being conducted by the traditional communities. Perhaps such initiatives can be taken by other private firms as well and the developing countries could themselves encourage such initiatives.

The developing countries though during the time of the negotiation did argue the case of their pharmaceutical industries and were against the product patents, yet the case of the local communities of the developing countries did not get debated

[132] "Ethnobotany" is defined as the study of how traditional communities use plants.
[133] Edgar J. Asebey and Jill D Kempennar, "Biodiversity Prospecting: Fulfilling the Mandate of the Biodiversity Convention", 1995, p.724.
[134] William K. Stevens, "Scientists and Shamans Seek Cure in Plants", *Miami Herald*, 2 February 1992, p.7C.

during the time of the TRIPs negotiations. The only way in which the diverse biological resources of the developing countries can be protected is by enhancing the work of the local communities. The developing countries like India and the countries of Latin America and Africa should adopt extensive biodiversity laws to protect their habitat fro being exploited and also to make sure that the traditional communities are not disempowered. Though there is an increasing realization of the relevance of the knowledge possessed by the local communities yet the attempt is to mould this knowledge within the realm of scientific and modern knowledge. The argument made is that it will also enhance the local communities but perhaps it is not being realized that the specialty of their knowledge is within the environment where they practice it and their knowledge has also progressed by the constant methods of trial and error which any modern scientific community applies. There have been suggestions made that the knowledge of the traditional communities should be stored in archives for future references. This again is problematic as the importance of these kinds of knowledge is that they are passed form one generation to another by the word of mouth.

The traditional communities and their knowledge can be preserved by leaving the custodians of such knowledge to take care of them and perhaps certain policy options adopted by the developing countries could protect them from biopiracy which is now more apparent after the provisions within TRIPs. The emergence of TRIPs has meant the exercise of power over the knowledge of the indigenous communities and has created a divide between the two knowledge systems. There is a constant effort made by the multinational research agencies to gain and control

the knowledge of these communities. The indigenous communities in many of these countries have also become aware of the exploitation of their resources and their knowledge. In the name of benefit sharing the companies give them a small percentage of the share which is negligible to the profit that these companies earn out of the products made form the traditional knowledge.

Even though a debate has been initiated by the developing countries in WTO to protect the rights of the local communities, it seems highly unlikely that a new framework to protect the traditional knowledge will be inserted into TRIPs in the near future. Therefore the developing countries should try and advocated for minimalist measures to safeguard the misappropriation of traditional knowledge systems. Perhaps a strong case should be made to demonstrate the problems that the local communities face because of the patenting of their knowledge. There is a danger that the trade negotiators of the developing countries would sacrifice the interests of the local communities in return for concessions in other areas of trade and intellectual property rights. There is a need for the developing countries, who are genuinely concerned about the protection of local knowledge, to find solutions at the national level. Once at the national level strict laws are made to protect the rights of the local communities, then the case to defend the rights of these communities at the international level becomes even more strong and easier to accomplish. The state laws of most of the countries in protecting traditional knowledge are not much advanced. There are some countries which have started to design national legislation on biodiversity, implementing the CBD and have started making rules which would restrict the biopiracy of their rich biological resources.

The concept of intellectual property rights stemming from industrial progress and capitalist development is not suited as such for the protection of genetic and traditional knowledge.[135] The traditional knowledge which is undisclosed to a wider public and perhaps limited to shamans or other institutions might not enjoy the protection under the modern law of undisclosed information. The traditional knowledge should not only be seen as something that needs to be conserved but efforts should be taken to develop such knowledge. The development of traditional knowledge is often neglected in discussions which mainly focus on the protection of traditional knowledge. Though the possibilities of the protection of traditional knowledge through the modern intellectual property are being explored, yet the shape and administration of the existing systems do not necessarily favour and encourage the use of traditional knowledge. The patent registration in many countries is costly, cumbersome and out of tune with the way of life of rural and in particular local communities. Moreover, the current patent systems have difficulty in accepting communal rights which is alien to an instrument designed by the industrial society. There is a need to have swift and patty patent systems for the protection of the traditional communities. A movement to protect grassroots innovation should seek the introduction of simple and inexpensive systems which would provide incentives and returns on licensing such inventions. Several proposals have been made in this regard by Non-Governmental Organizations (NGOs), to ensure that naturally occurring materials are not patented, which would protect the rights of local communities.[136] With the increase in the interaction

[135] Ajeet Mathur, "Who Owns Traditional Knowledge?", *Economic and Political Weekly*, Vol. 38, No. 18 October 2003, p.4472.
[136] Carlos M. Correa, "Review of the TRIPs Agreement: Fostering the Transfer of Technology to Developing Countries", 1996, p.946.

between the "scientific knowledge systems" and traditional knowledge systems there has emerged a necessity to protect the traditional knowledge and the interests of the local communities who own them.

Therefore multilateral agreements such as TRIPs strongly impact upon the lives of local communities. Globalization has profoundly influenced every group across the globe and the questions over the rights of traditional communities after the implementation of TRIPs is one aspect of it. It is difficult to protect the rights of traditional communities within the framework of contemporary globalization whose rules are based on coercive power politics, dominated by groups and states which determine the course of international treaties and organizations. It is important to develop mechanisms at the national level to recognize the rights of these communities before advocating for their rights at the international forum.

Conclusion

Contemporary globalization, intrinsically linked to capitalist system cannot be considered as merely an extension of earlier attempts to integrate the world. Though there are similarities between the current globalization process and the integration of world economy between late 1880s till the First World War, yet the present globalization process differs on the basis of the magnitude and extent of integration and the cause, effect and response to the current developments. The global developments are governed and controlled for the benefit of the powerful countries by international agencies, which operate on behalf of these countries. Though power has been an essential aspect of capitalist system, yet the methods acquired to institutionalize power and the means to exercise it has changed in contemporary globalization.

A profound relationship has emerged between power and knowledge in this phase of globalization. Knowledge has become instrumental in influencing power both at the international level between countries and at a local level between knowledge systems. Knowledge is defined according to the needs of the powerful and advanced industrialized countries. The way creative knowledge has been defined in terms of intellectual property rights is based on capitalist belief of individual ownership promoting the needs of industrialized capitalist societies. Moreover, there is a tendency to promote and develop certain forms of knowledge which again is suited to the requirements of developed countries. A hierarchy has been created among knowledge systems, eventually leading to the subjugation of

those forms of knowledge which are lower down the hierarchy and are generally part of the developing world. The stratification of knowledge systems generates power, which is legitimized through multilateral agreements like TRIPs and international organizations like WTO.

The creation of international organizations like International Monetary Fund, World Bank and World Trade Organization was part of the process of globalization and the policies taken up by these organizations to promote privatization and integration of international trade and finance have proven beneficial to developed countries. The ratification of TRIPs agreement and shifting jurisdiction of intellectual property rights from WIPO to WTO is in league of a larger process of power politics where organizations like WTO have been created to legitimize the perspectives of developed countries and to ensure that the benefits of international trade are tilted in favour of these countries. The understanding of the concept of intellectual property rights within TRIPs agreement is based on natural rights theory, which is appropriate for developed countries whose economies are capitalist ownership and are not dependent on imported technologies. A systematic attempt is being made to seize the reins of knowledge by developed economies and agreements like TRIPs are a means to acquire that.

Both coercive and non-coercive power is used simultaneously in the current globalization process. Coercive power is imparted blatantly and authoritatively to establish authority over a particular matter. The sanctions imposed on developing countries by United States and European Union on the basis of laws like Special

301 and Super 301 were direct coercive methods of power to make developing countries agree to the provisions of TRIPs. The subtle mechanisms of power were exercised through the bilateral agreements that were reached on various intellectual property rights between countries and in this regard the agreement reached between United States and Taiwan along with similar such agreements demonstrate the negotiation tactics.

Sovereign states are not the only participants of power politics in contemporary globalization, but commercial interest groups and non-state actors have acquired a strong influential role. The gains of globalization are actually shared by these commercial groups mainly in the developed countries and therefore they lobby to ensure that their interests are secured. The Uruguay Round negotiations were a victory significantly for these commercial groups than for nation-states. The pharmaceutical giants of United States, Europe and Japan lobbied within their countries to protect their interests as far as intellectual property rights were concerned and were a major reason for shrinking the differences between their governments to reach an agreement. The commercial groups of developed countries have gained from globalization process mainly because of the powerful position their countries enjoy at international level. In this respect multinational companies of developed countries have been able benefit at the expense of the commercial groups within developing countries.

The decision making at the level of international organizations, though seems to be democratic with the participation of all the countries, yet the reality is far from it. Decisions are often arbitrarily arrived by ignoring the requirements of weaker

countries as well as groups within these countries. Democratic decision making is one where all participating parties are at an equal footing and are given equal weightage by respecting each of their views. But, what is actually happening within contemporary globalization is an attempt to homogenize the norms of trade and international economy not by democratic choice but more by the use of coercive power. Multilateral agreements are primarily a means to legitimize the policies of powerful states. The negotiation process of TRIPs agreement revealed that most of the decisions were taken outside the negotiating table by forming groups and these groups were dominated by developed countries and sometimes developing countries were not even aware of the decisions taken within them.

Certain developing countries like China and India have witnessed rapid economic growth in the past decade and have tried to profit from present globalization process. But, it has been difficult for these countries to secure their interests at a global level where the attempt of developed countries have been to ensure that the rewards of globalization are shared among themselves. The globalization of intellectual property rights through TRIPs was initiated by developed countries primarily because a stiff competition was given to their products by newly emerging industries in developing countries and this was done by imitating the technology of developed countries. The newly emerging pharmaceutical sectors as well as biotechnology centers of developing countries were successfully competing with the already existing pharmaceutical giants of developed countries. Therefore, pharmaceutical industries of developed countries lobbied for TRIPs to restrict the flow of free technology from developed to developing countries. Though developing countries also tried to cater for their interests at the Uruguay

Round, they were not able to bend the language of the agreement to their advantage mainly because of oppressive negotiating tactics used by developed countries. In international politics sovereign nation states try to protect their interests but certain countries are better equipped to secure their interests primarily due to the use of power and at the expense of the interests of weaker countries.

If globalization process has not benefited all the countries of the world, then it is mainly because of the deliberate mismanagement of this process by the powerful actors who control certain aspects of it. The process of globalization is controlled, the ethics of which are decided by the powerful. A free flow of technology and information would ensure that the benefits of globalization reach all the countries. But, there is a deliberate intrusion made by developed countries to regulate the globalization process and dictate its terms to weaker countries. Subtle power mechanisms are utilized by conceding short term benefits to weaker countries but guaranteeing that the long term gains are made by powerful commercial groups. This was done during TRIPs negotiations when small benefits like agricultural subsidies, Most-Favoured-Nation status, and WTO membership were provided in return for developing countries' agreement to meet the standards of developed countries in intellectual property rights.

The lack of understanding of developing societies while creating the rules of global trade and economy has resulted in the subjugation of certain communities who over the years have not functioned on the basis of capitalist economic pattern. Based on the concept of natural right to individual ownership of creative

knowledge, TRIPs which is a part of globalization process cannot suit the requirement to protect the creative knowledge of local communities in developing countries. On the contrary the agencies of globalization like WTO encourage policies which cause exploitation of the interests of certain communities by the large multinational commercial groups. The policies of globalization which are made for multinational powerful groups result in the marginalization of small local communities. While protecting the intellectual property rights of individual firms through the Dunkel Draft, a systematic exploitation of the creative knowledge of traditional local communities of developing countries has been allowed. It is difficult to protect the collective rights of local communities through the laws of intellectual property rights in the form of patents, copyrights, or trade marks. For these communities creative knowledge is not a matter of ownership but a means of their livelihood and part of their tradition and culture. The free use of traditional local knowledge to invent drugs for commercial purposes and claiming patent over them without providing adequate compensation and due credit to these communities raises serious doubts on the capability of globalization process to accommodate the needs of all communities. Knowledge is used as power under the current globalization process as local forms of knowledge are being marginalized to benefit the needs of more advanced forms of knowledge like biotechnology and genetic sciences.

The magnitude of global changes has benefited powerful commercial groups of developed countries by subjugation of the interests of developing societies. This subjugation has been legitimized at the global level through organizations which operate on behalf of powerful countries. It is primarily due to the coercive nature

of the subjugation and the imposition of the norms of globalization on developing countries and their societies, that the process of globalization has received extreme responses. At the one end are the multinational giants of developed countries who are staunch advocates of the globalization process which is being governed by International Monetary Fund and WTO. At the other end are the interest groups mainly from developing countries comprising of low wage laborers and farming communities who have staged protests against the process of globalization.

The globalization process unless it is genuinely made democratic and suited to the requirements of different societies will continue to be asymmetrical and governed by coercive power politics. This is possible only when powerful interest groups in developed countries are willing to share the benefits of the process with the less developed societies. Similarly, the implementation of TRIPs agreement has resulted in protecting the intellectual property rights of few individual firms and the creative rights of traditional communities can only be protected with adequate international norms and by reducing the cases of biopiracy of traditional knowledge. Therefore the TRIPs agreement to standardize the norms of intellectual property rights cannot be termed as democratic and representative of the rights of all types of creative knowledge and communities.

Power in the current phase of globalization is control over knowledge and information. Therefore those groups and countries which are able to control knowledge systems have benefited from globalization. Commercial groups in developed countries have manipulated global commercial activities and emerged as real winners of globalization.

Appendix: full text of the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPs Agreement)

Preamble

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 enforce intellectual properly 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 property rights, taking into account differences in national legal systems;

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

(e) Transitional arrangements aiming at the fullest participation in the results 01" the negotiations;

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 developmental and technological objectives;

Recognizing also the special needs of the least-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 the World Intellectual Property Organization (referred to in this Agreement as 'WIPO') as well as other relevant international 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 these provisions of this Agreement. Members may, but shall not be obliged to, implement in their law more extensive protection than is required 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 large' 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.' 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 protection provided for in the Paris Convention (1967), the Berne Convention (1971), the Rome Convention and the Treaty on Intellectual Property in Respect of Integrated Circuits, were all Members of the WTO Members of those conventions.3 Any Member availing itself of the possibilities provided in paragraph 3 of Article 5 or paragraph 2 of Article in 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 Properly in Respect of Integrated Circuits-

Article 3

National treatment

1 Each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard lo the protection of intellectual property, subject to the exception? Already provided in, respectively, the Paris Convention (19G7), the Berne Convention (1971), the Rome Convention or the Treaty on Intellectual Property in Respect of Integrated Circuits. In respect of performers, producers of phonograms and broadcasting organizations, this obligation only applies in respect of the rights provided under this Agreement. Any Member availing itself of the possibilities provided in Art-ck 6 of the Berne Convention (1971) or paragraph l (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 provisions of this Agreement and where such practices are not applied in a manner which would constitute a disguised restriction on trade.

Article 4

Most-favoured-nation treatment

With regard to the protection of intellectual properly, any advantage, favour, 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 are any advantage, favour, privilege or immunity accorded by a Member;

(a) deriving 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 Rome Convention authorizing that the treatment accorded be a 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 nationals of other Members.

Article 5

Multilateral agreements on acquisition or maintenance of protection

The obligations under Articles 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 properly rights.

Article 7

Objectives

The protection and enforcement of intellectual properly 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 which 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 I: copyright and related rights

Article 9

Relation to the Berne Convention

1 Members shall comply with Articles 1 through21 of the Berne Convention (197t) and the Appendix thereto. However, Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6*bis* of that Convention or of the rights derived therefore

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 object code, shall be protected as literary works under the Berne Convention (1971).

2 Compilations of data or other material, whether, in machine readable or other forms, which by reason of the selection or arrangement of 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 least computer programs and cinematography 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 worlds which is materially impairing the exclusive right of reproduction conferred in that Member on authors and their successors in 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

Term 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 years of authorized publication, or, tailing such authorized publication within 50 years from the making of the work, 50 years From the entry of the calendar year of making.

Article 13

Limitations and exceptions

Members shall confine limitations or except ions 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. Performers 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, and the; rebroadcasting by wireless means of broadcasts, as well as the communication to the public of television broadcasts 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 1 in 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, it 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 provisions of Article lo 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

Protectable subject matter

1 Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs in particular words including personal names, letters, numerals, figurative elements and combinations of colours 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. Members may require, as a condition of registration, that signs be usually 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 an application for registration. An application shall not be refused solely on the ground that intended use has not taken place before 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 he 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 nor prejudice any existing- prior rights, nor shall they affect the possibility of Members making rights available on the basis of use.

2 Article 6*bis* of the Paris Convention (1967) shall apply, *mutatis mutandis*, 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 1

lie 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 services 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 I7

Exceptions

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

Article 18

Term of protection

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

Article 19

Requirement of use

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 reason' 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 s' 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 form or use in a manner detrimental to its capability to distinguish the goods or services 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 that 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 an act of unfair competition within the meaning of Article 106bis 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 to 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/or 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 not originating in the place indicated by the geographical indication m 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.'

2 The registration of a trademark for wines which contains or consists of a geographical indication identifying wines or for spirits which contains or consists of a geographical indication identifying spirits shall be refused or invalidated, ex officio if a Member's legislation so permits or at the request

of an interested 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 TRIPs 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 into 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 negotiations, Members shall be witting t0 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 10 the attention of the Council, which, at the request of a Member, shall consult with any Member or Members in respect of such matter in 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 domiciliaries who have used that geographical indication in a continuous manner with regard to the same or related goods or services in the territory of that Member either (a) for at least 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 good 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 a 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 which 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 in 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 a grape variety

existing in the territory of that 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 known in 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 dale is earlier than the date on which the adverse use became 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 to use, in the course of trade, that person's name or the name of that 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 lo 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 known design features. 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 amount to at least 10 years.

Section 5: patents

Article 27

Patentable subject matter

1 Subject to the provisions of paragraphs 2 and 3, patent's 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.5 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 Held 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 *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious 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 production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis 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

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 for these purposes that product;

(b) where the subject matter of a 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 for 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.

Article 29

Conditions on patent applicants

1. Members shall require that an applicant for a patent shall disclose the invention in a manner sufficiently clear and complete for the invention to be 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.

2 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 use1 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;

(b) such use may only be permitted if, prior to such use, the proposed user has made efforts to obtain authorization from the right "holder on reasonable commercial tern-is 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 a national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonably 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;

(c) such use shall be non-assignable, except with that part to the enterprise or goodwill which enjoys such use;

(f) any such use shall 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 is unlikely to recur. The competent authority shall have the authority 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 is 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 111 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;

(1) 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-licence 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

Term a/protection

The term of protection available shall not end before the expiration of a period of twenty years counted from the filing date.

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 t(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 (o order the defendant to prove that the process to obtain an identical product is different from the patented process. Therefore, Members shall provide, in at least one of the following circumstances, that any identical product when produced without the 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 Articles 2 through 7 (other than paragraph 3 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:9 importing, selling, or otherwise distributing for commercial purposes a protected layout-design, an integrated 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 an 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 an integrated circuit incorporating an unlawfully reproduced layout-design or any article incorporating such an integrated circuit wher'-1 ;he person performing or ordering such acts did not know and had no reasonable ground to know, when acquiring the integrated circuit or article incorporating such an integrated circuit, that it incorporated an unlawfully reproduced layout-design- Members shall provide 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 ads 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 licence 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

Term 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 lapse 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 \0bis of the Paris Convention (1967), Member shall protect undisclosed information in accordance with paragraph and data submitted to governments or governmental agencies 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 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 the person lawfully in control of the information, to keep it secret.

3 Members, when requiring, as a condition of approving the marketing pharmaceutical or of agricultural chemical products which utilize chemical entities, the submission of undisclosed test or other data origination of which involves a considerable effort, shall protect data against unfair commercial use. In addition, Members shall pr such data against disclosure, except where necessary to protect the p' 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 licences

Article 40

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

2 Nothing in this Agreement shall prevent Members from specifying their legislation licensing practices or conditions that may in pal cases constitute an abuse of intellectual property rights having an effect on competition in the relevant market. As provided a Member may adopt, consistently with the other provisions Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grantback 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 consultations 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 fur 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 an ultimate decision of" either Member. The Member addressed shall accord full and sympathetic consideration to, and shall afford adequate opportunity for, consultations 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 domiciliaries are subject to proceedings in another Member concerning alleged violation 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 for 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 ii 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 properly 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' civil judicial procedures concerning the enforcement of any intellectual properly 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. Ail 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: contrary to existing constitutional requirements.

Article 43

Evidence

1. The 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 ensure 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 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 alia*, 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 of 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 (he 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 properly right by an infringer who knowingly, or with reasonable grounds to know, engaged in infringing activity.

2 The judicial authorities shall also have the authority to order the infringer to pay the right holder expenses, which may include appropriate attorney's fees. In appropriate cases, Members may authorize the judicial authorities to order recovery of profits and/or payment of pre-established damages even

where the infringer did not knowingly, or with reasonable grounds to know, engage 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 (o 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 fees. In respect of the administration of any law pertaining to 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

To the extent that any civil remedy can be ordered as a result of administrative procedures on the merits to a case, such procedures shall conform to principles equivalent in substance to those set forth in this Section.

Section 3: provisional measures

Article 50

1 The judicial authorities shall have the authority to order prompt and effective provisional measures:

(a) to prevent an infringement of any intellectual property right from occurring, and in particular to prevent the entry into the channel of commerce in their jurisdiction of goods, including imported goods immediately after customs clearance;

(b) to preserve relevant evidence in regard to the alleged infringement.

2 The judicial authorities shall have the authority to adopt provisional measures *inaudita altera parte* where appropriate, in particular where any delay is likely to cause irreparable harm to the right holder, or where there is a demonstrable risk of evidence being destroyed.

3 The judicial authorities shall have the authority to require the applicant to provide any reasonably available evidence in order to satisfy themselves with a sufficient degree of certainty that the applicant is the right holder and

that the applicant's right is being infringed or that such infringement is imminent, and to order the applicant to provide a security or equivalent assurance sufficient to protect the defendant and to prevent abuse,

4 Where provisional measures have been adopted *inaudita altera parte*, the parties affected shall be given notice, without delay after the execution of the measures at the latest. 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 after the notification of the measures, whether these measures shall be modified, revoked or confirmed.

5 The applicant may be required to supply other information necessary for the identification of the goods concerned by the authority that will execute the provisional measures.

6 Without prejudice to paragraph 4, provisional measures taken on the basis of paragraphs 1 and 2 shall, upon request by the defendant, be revoked or otherwise cease to have effect, if proceedings leading to a decision on the merits of the case are not initiated within a reasonable period, to be determined by the judicial authority ordering the measures where a Member's law so permits or, in the absence of such a determination, not to exceed 20 working days or 31 calendar days, whichever is the longer.

7 Where the provisional measures are revoked or where they lapse due to any act or omission by the applicant, or where it is subsequently found that there has been no infringement or threat of infringement of an intellectual property right, the judicial authorities shall have the authority to order the applicant, upon request of the defendant, to provide the defendant appropriate compensation for any injury caused by these measures.

8 To the extent that any provisional measure can be ordered as a result of administrative procedures, such procedures shall conform to principles equivalent in substance to those set forth in this Section.

Section 4: special requirements related to border

Article 51

Suspension of release by customs authorities

Members shall, in conformity with the provisions set out below, adopt procedures 13 to enable a right holder, who has valid grounds for suspecting that the importation of counterfeit trademark or pirated copyright goods14 may take place, to lodge an application in writing with competent authorities, administrative or judicial, for the suspension by the customs authorities of the release into free circulation of such goods- Members may enable such an application to be made in re sped of goods which involve other infringements of intellectual property rights, provided that the requirements of this Section are met. Members may also provide for corresponding procedures concerning the suspension by the customs authorities of the release of infringing good'- destined for exportation from their territories.

Article 52

Application

Any right holder initiating the procedures under Article 51 shall be required to provide adequate evidence to satisfy the competent authorities that, under the laws of the country of importation, there is prima facie an infringement of the right holder's intellectual property right and to supply a sufficiently detailed description of the goods lo make them readily recognizable by the customs authorities. The competent authorities shall inform the applicant within a reasonable period whether they have accepted the application and, where determined by the competent authorities, the period for which the customs authorities will take action.

Article 53

Security or equivalent assurance

1 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 or equivalent assurance shall not unreasonably deter recourse to these procedures-.

2 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 independent authority, and the period provided for in" Article 55 has expired without the granting 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 the 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 not exceeding 10 working days 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 a 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 to 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. Members may provide the 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

(a) Where Members require competent authorities to act upon their own initiative and to suspend the release of goods in respect of which they ha\ 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 actions 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 and competent authorities shall have the authority to order the destruction or disposal of infringing goods in accordance with the principles set out in Article 46. In regard to counterfeit trademark goods, the authorities shall not allow the re- 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

Article 61

Members shall provide for criminal procedures and penalties to be applied at least in cases of wilful trademark counterfeiting or 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 wilfully and on a commercial scale.

PART IV: ACQUISITION AND MAINTENANCE OF INTELLECTUAL PROPERTY RIGHTS AND RELATED INTER PARTES 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 concerning the acquisition or maintenance of intellectual property rights and, where a Member's law provides for such procedures, administrative revocation and inter *partes* procedures such as opposition, revocation and cancellation, shall 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 of invalidation procedures.

PART 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 (his Agreement (the availability, scope, acquisition, enforcement and prevention of the abuse of intellectual property rights) shall be published, or where such publication is 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 is in force between the government or a governmental agency of a 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 regulations directly to the Council if consultations with \\"1PO on the establishment of a common register containing these laws and regulations 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 son 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 interests of particular enterprises, public or private.

Article 64

Dispute settlement

1 The provisions of Articles XXII and XXIII of GATT 1994 as elaborated and applied by the Dispute Settlement Understanding shall apply lo consultations and the settlement of disputes under this Agreement" except as otherwise specifically provided herein.

2 Subparagraphs l(b) and l(c) of Article XXTII 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 i (b) and 1 (c) of Article XXIII of GATT 1994 made pursuant to this Agreement, and submit its recommendations to the Ministerial 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 provisions 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 transform anon 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, regulations 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 and administrative constraints, and their need for flexibility to create a viable technological base, sue! Members shall not be required to apply the provisions of this Agreement other than 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 duty motivated request by a least-developed country Member, accord extensions of this period.

2 Developed country Members shall provide incentives to enterprises and institutions in their 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, developed country Members shall provide, on request and on mutually agreed terms and conditions, technical and financial cooperation in favour of developing and least-developed 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 mailers, including the training of personnel.

PART 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 Members the opportunity of consulting on matters relating to the trade-related aspects 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 contex.1 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 consultation 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 other with a view to eliminating international trade in goods infringing intellectual property rights. For this purpose, they shall establish and notify contact points in (heir 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 pirated copyright goods.

Article 70

Protection of existing subject matter

1 This Agreement does not give rise lo obligations in respect of ac-ts 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 mailer 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 of 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 produce-s of phonograms and performers-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 may provide for a limitation of the remedies available to the right holder as to the continued-performance of such acts after the dale of application of this Agreement for that Member- Ir. such cases the Member shall, however, at least provide for the payment of equitable remuneration

5 A Member is not obliged to apply the provision; 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 I 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 of 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 dale 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) not withstanding the provisions of Part VI, provide as from the dale of entry into force of the WTO Agreement a means by which application for patents for such inventions can be filed;

(b) apply to these application, 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 dale 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 referred 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 that 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 filed 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 the WTO Agreement on the basis of 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 consent of 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 interests;

(i) relating to l'isslonable 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

(c) 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.

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