Concluding Remarks

The international regime governing intellectual property rights is in the process of being shaped through the controversy between two opposing viewpoints. One position, led by corporations in advanced nations, holds that greater intellectual property protection would lead to innovation and technological growth. Companies with high stakes in IPRs are attempting to promote the worldwide extension of intellectual property rights, claiming that weak IPRs lead to "piracy". The contrary view, led by developing nations and non-governmental organizations, argues that expansion of IPRs would lead to monopoly control over information resources, restricting the transfer of technology and giving rise to litigation. These groups assert that the IPR system is unfair in that it recognizes only one sphere of knowledge, ignoring the innovations of farmers and local communities. They claim that developed nations are engaging in "bio-piracy" through the patent system.

This study focused on the IPR conflict between the US and India as an important development in international relations. The study revealed the attempts adopted by India and the US to promote their interests on the issue and why this is leading to controversy between these two nations. India and the United States have differing perspectives on the purpose, scope and content matter of intellectual property protection. The United States, through trade pressure, moral persuasion, and well-equipped legal skills, has been able to promote its view of intellectual property. India has attempted to resist change, but is slowly being
integrated into the patent regime established by the US. India is attempting to promote its interests by asserting its rights over genetic resources and traditional knowledge. US patent policy is thus leading India to adopt a more private property view of information resources. The study reveals significant factors involved in shaping international politics more generally, and specifically regarding the formation of policy in India and the United States.

**IPRs and International Relations**

The IPR controversy reveals certain important facets of international relations. Although countries are still engaged in the process of defining the scope and extent of intellectual property protection, the study enables us to draw some important conclusions about the way nations promote their interests in the international arena. The first significant conclusion that emerges from the study is that intellectual property rights are not purely technical matters to be confined to the realm of international law. IPRs are strongly shaped by the way actors define it, and are not determined only by the application of established rules. The IPR system of any country is based on ideological factors, and involves social, economic, and political aspects and is shaped by the active role of civil society. Determining whether biotechnology is a field of patentability or whether traditional knowledge should be protected by legal mechanisms does not occur with the application of technical standards but rather through the interests of various actors. The basmati and neem cases clearly reveal how the issues can be interpreted differently by various groups. In the basmati case, the Indian
government has failed to take advantage of the strong public opinion existing in India, which views the patent as a case of “bio-piracy”. The United States has not given attention to the upsurge on the issue, giving rise to criticism of injustice and lack of fair play. The accusations of “piracy” and “bio-piracy” result from varying points of view. Similarly, it is not clear whether greater IPRs would lead to an increase or a decrease in transfer of technology, innovation and economic growth. Gramsci’s analysis is important in this regard in pointing out the role of dominant groups in shaping the prevailing ideology. The perspective on IPRs would be determined by the ability of actors to assert their interests. Thus, IPRs are a political issue and not merely a set of legal standards.

Secondly, the battle over information resources is resulting in the contraction of goods in the public domain and an increase in private property. Resources that were considered to be in the public domain are increasingly being seen as private goods. While developed nations are increasing privatization through patenting life forms and other fields, developing nations are trying to bring genetic resources and traditional knowledge under their control. The impact of this development on flow of information, access to resources, and price of knowledge goods remains to be seen. Another important issue is the impact of such developments on local communities and farmers. Some argue that it will lead to empowerment of indigenous communities, while others claim that it may deprive them of resources and knowledge that they have developed.

Thirdly, the influential role that non-state actors can play in international politics is clear from the IPR issue. The controversy over intellectual property rights both in the developed and developing nations is being led by corporations.
non-governmental organizations, farmer's lobbies and various local groups. Companies in advanced and developing nations have been key actors in shaping the activities of states on the issue. Local groups are at the helm of the protest in developing nations and are responsible for pointing out the issue of "bio-piracy". Recognizing the relevance of NGOs in mobilizing public opinion, developing countries are involving non-governmental organizations in devising legislation to implement the Convention on Biological Diversity. The IPR issue has been largely shaped by the activities of various non-state actors.

Fourthly, the IPR issue reveals how nation-state boundaries are being crossed by non-state actors. The controversy over 'bio-piracy', for example, witnessed linkages from local communities to the international sphere. Farmer's organizations, non-governmental groups and others were enraged by the conclusion of the TRIPs Agreement in the WTO, and were able to ensure that their voices were heard at the international level. Actors at the international stage co-ordinated with local communities in raising the issue.

Fifthly, ideas can play an important role in international relations. The US, in promoting its IPR policy, could not rely purely on trade threats but also had to influence the mindset of important actors in other nations. Gramsci's analysis provides a framework for analyzing how dominant groups in the US, along with intellectuals, projected the rationale of IPRs. The United States had to convince allies and important actors in developing nations of its perspective on IPRs in order to effectively institute change. The role of ideas is also important in understanding how developing nations redefined their perspective of genetic resources and traditional knowledge. The attempts of the US to channelize the
demands of developing nations into its framework also provides an example of the role of ideas. As developing nations are beginning to demand recognition of genetic resources and traditional knowledge, the US is trying to promote biodiversity prospecting as the alternative. Biodiversity prospecting is a market-based mechanism that can be fitted into US IPR policy. The United States, with its lack of genetic resources, is trying to place itself in an advantageous position through the IPR regime. The US is trying to interpret biodiversity prospecting as a means of implementing the Convention on Biological Diversity. This would mean that compensation would be granted for use of genetic resources and traditional knowledge, but that there would be no revision of existing IPR systems to recognize such resources. Many non-governmental organizations in developing nations have accepted this model as the best alternative under the circumstances. The way power and resources are interpreted in international relations is just as important as material factors.

Finally, the study brings to light the fact that rational choice may not always be the right perspective to describe the policies of nations. IPR policies reflect ideological perspectives of nations. The developing nation’s view of ownership rights over information has been shaped by normative factors. For decades, developing nations accepted the common heritage principle, even though this was not a rational choice as these resources were found in their territories. They rejected the common heritage principle when they learned that this was not in their interests. Perceptions and ideas played a key role in shaping policy. In the case of the United States, lax enforcement of IPR policies existed until the 1980s. It was only after corporate actors pointed out the need for greater IPRs that the US
began promoting it. The large-scale protest by developing nations against US IPR policies cannot be explained by rational choice. There were many other policies being promoted by the US dealing with economic liberalization that were perceived as being harmful to developing nations. It was the IPR issue, which was a highly complex topic, that caused the enormous outburst. This was due to the perception that the granting of patents on certain products (such as neem, haldi and basmati) affected the culture of India deeply. Thus, interests and power are not fixed, but change according to perceptions. Dominant social groups, as pointed out by Gramsci, are important in shaping these perceptions. Nation-states do not make choices purely by rational choice, but are influenced in their decisions by normative factors.

**US IPR Policy: Impact on India**

The IPR policy of the United States is leading India to adopt a more commercial and private property view of information. The change is occurring not only in relation to high technology fields but also with regard to traditional knowledge and genetic resources. India is gradually beginning to redefine its approach towards patents and has rejected the common heritage view of genetic resources due to US patent policy.

The United States evolved an IPR policy suited to its interests and promoted this policy worldwide. By utilizing trade pressure and ideological dominance, the United States ensured that its approach towards IPRs became accepted internationally. The IPR policy of India and other developing nations
were labeled as “piracy” and theft of US technology and ideas. India’s attempt to follow a different model of property protection was criticized heavily by the United States. A strong domestic lobby in India played a role in fostering India’s vociferous resistance against US demands for changing its patent laws. Inspite of enormous opposition for several years, India is now gradually being integrated into the US patent regime. A slow process of change in viewpoint is emerging in India as a result of US pressure. The demise of the Soviet Union also leaves India without an alternative source of foreign technology. Industry and scientific institutions are voicing the need to ensure greater patent protection and are attempting to modify their approach in order to facilitate technology transfer. Although protest still exists against revising India’s patent policy, such opposition is gradually weakening.

On the issue of genetic resources and traditional knowledge, a clear shift is taking place both within India and internationally. US policy of acquiring patents derived from genetic resources and traditional knowledge has been labeled as “bio-piracy” by India. A strong domestic consensus exists on the need for India to protect its resources against US patent policy. US policy is leading India to assert its sovereign right over resources found in India, abandoning the common heritage view that existed for decades. Thus, India is changing its approach towards ownership rights over information and knowledge. However, India has not yet evolved a clear-cut policy on the issue. Contradictory domestic pressures exist within India as various actors are promoting different policy alternatives. There is no unified stance from industry, among non-governmental organizations or other lobbies on how India can best protect its interests on the issue of IPRs. India will
be faced with making difficult policy choices on the issue of patents in the days ahead.

**Strategy Choices for India and Other Developing Nations**

The strategy choices that India will have to make on the issue of patents will be important for India’s economic, political and social development. Two major options that India could adopt can be pointed out, with minor variations on these constituting other alternatives. One path would be to increase patent protection and attempt to promote scientific research to produce patentable products. India could try to tap into its enormous science and technology base, making use of both modern and traditional knowledge existing in India. This would involve adopting a commercial outlook in seeking economic gain from genetic resources and indigenous knowledge. India would then have to revise the patent system to protect high-technology fields, and also find means to protect indigenous knowledge and genetic resources.

The real difficulty here is that India and other developing nations are already well behind in the patent race. Developing nations own just 1% of all patents granted in the world. An enormous shift in view on the part of scientists, administrators and industry would be required to compete for patents. India and other developing nations are constrained from securing high economic returns from commercializing genetic resources and traditional knowledge due to inadequate infrastructure. Enormous financial and research capability is required to create marketable products out of such resources. In addition, such market-
based strategies towards resources that exist mainly with local communities, may
or may not lead to their empowerment, depending on the national enterprise and
NGO activity.

A second alternative would be to resist changing IPR laws and demand a
more equitable regime of ownership rights over information. The strategy would
mean resisting change in patent laws and promoting the need for balancing public
interest with the need for encouraging innovation. The IPR policies as outlined by
TRIPs would have to be redefined to accommodate genetic resources and
traditional knowledge, and to allow nations to establish patent systems suited to
their needs. The demands of developing nations articulated in the Convention on
Biological Diversity would have to be balanced with TRIPs. In addition, the issue
would have to be analyzed from a broader perspective involving social, political
and economic factors, rather than narrowing it to a legal framework.

Although India would have to face trade pressure from the US in adopting
this strategy, there are certain advantages that India has which can be exploited to
promote its interests. The IPR issue is in the process of taking shape in advanced
nations. Even the United States has certain reservations on how to balance the
need for flow of information with the incentive for innovation. Domestic lobbies
within the US, including some corporations, also voice criticism of the way the
patent system functions. The United States is also not yet clear on how to respond
to the demands of developing nations to recognize and reward traditional
knowledge and genetic resources. India can take advantage of the variety of
individuals, non-governmental organizations and corporations in developed
nations who also feel that the patent system may be hindering flow of information.
The TRIPs Agreement will come under review in the year 2000. This could provide developing nations an opportunity to put forth their demands. Within the WTO, India has been arguing for more equitable IPR standards and has forcefully promoted the view that there should be no patents on life forms.

Non-governmental organizations both in developing and developed nations are a powerful force that would promote the cause of developing nations. The variety of farmer’s lobbies, consumer groups, political activists and NGOs worldwide could be effectively mobilized on the issue to the advantage of developing nations. Several NGOs in advanced nations are convinced of the dangers of biotechnology. Enormous public opinion also exists on the issue of biotechnology.

The Convention on Biological Diversity provides a framework upon which developing nations can build their movement. The lessons learned from the ability of developing nations to conclude this agreement can be translated into policy on implementing the treaty.

India and other developing nations thus have important strategic choices to make in the near future. The intellectual property structure of a nation reaches deep into a country’s polity, society and economy. The choices made on the IPR issue will have significant implications for India and other developing countries.

Current Developments and Future Issues

The IPR issue will continue to be shaped by new developments at the international, national, and local level which are occurring at a rapid pace. The
international arena will witness heated controversy over TRIPs in the World Trade Organization over the course of this year and the next. A review of the most contentious clause in TRIPs (Article 27.3 (b)), which deals with patent protection of biotechnology, is currently under way in the Council for TRIPs. A series of meetings have already taken place and several more are scheduled over the course of 1999. The 3rd WTO Ministerial meeting will take place in November-December in Seattle, 1999. In addition, the entire TRIPs Agreement will come up for review in the year 2000. Other forums in the WTO, such as the Committee on Trade and Environment, have also witnessed controversy over the issue and promises to be an arena of future conflict. The Convention of Parties (COP) meetings are taking place under the Convention on Biological Diversity.

Developing nations are in the midst of framing laws on biodiversity. NGOs worldwide are extremely active on the need for devising equitable patent laws. Within the United States, for example, an NGO known as the Center for International Environmental Law (CIEL) has recently filed for re-examination of patent granted in the US based on traditional knowledge from a developing country. Global awareness of the patent issue is increasing.

The impact that developing nations are having on the course of events becomes evident from the meetings currently under way in the Council on TRIPs on Article 27.3 (b). Before the start of the TRIPs review, it was anticipated that the US would try to push for a revision of the clause to assert that patents must be granted for plant varieties or at least that it legislation should conform to UPOV 1991. However, as the meetings began, it was clear that the US was not going to call for a revision but rather wanted a status quo position maintained. India and other developing nations, on the other hand, took the lead in seeking a revision of
the clause. At the meetings, the US and other developed nations stressed that it was a review of the implementation, while developing nations wanted a review of the provision itself. The International Chamber of Commerce (ICC) called for status quo on the article. The position of the ICC, along with the forceful assertions of developing nations are factors that shaped US decision to call for status quo. India was especially active in floating proposals on biodiversity and life forms. In another body of the WTO, the Committee on Trade and Environment, India has been strongly making such proposals for the past three years. The real decisions, it appears, would be taken at the 3rd WTO Ministerial to be held in Seattle, Washington in November-December 1999. The patent conflict promises to give rise to heated controversy both within and outside the WTO.

The Indo-US patent conflict is growing in intensity with new issues emerging rapidly. The Times of India recently (July 15, 1999) carried an article on the front page captioned “Use of ‘karela’, ‘jamun’, ‘brinjal’ patented by US firm”. The patent promises to be another source of tension as knowledge of these plants exist in India while the patent has been granted to a company in the United States. A New Jersey based firm, Cromak Inc., acquired the patent on May 4th on the anti-diabetic properties of these plants. The issues of “bio-piracy” and the stance that India should adopt to deal with such patents are being debated again. The patent illustrates the current nature of the conflict.

The battle between nations regarding ownership of commercially important information promises to be an arena of heated dispute. The controversy between the US and India over patents will continue to escalate in the days ahead, and India and the US will play a decisive role in shaping the IPR regime.