Introduction

Intellectual Property Rights (IPRs), until recently considered an obscure field of law, have emerged as a highly controversial issue in international politics. Intellectual Property Rights are limited property rights over information, ideas and knowledge. Property rights over information have become an important form of capital for nations determining their power position in the world economy. Countries are seeking control over various knowledge goods from computer chips to DNA fragments. The emergence of the information age is leading to what has been characterized as an “intellectual land grab” between nations. The battle over IPRs is not limited to the international competition for power and wealth between nations. Property is a constitutive principle that involves various ideological factors. Any conflict over property is intimately tied up with notions of identity, sovereignty and statehood. In addition, the issue of IPRs raises serious questions regarding the distinction between public and private ownership of intangible property.

The IPR issue is causing enormous controversy between developing and developed nations involving social, economic and political factors. It has generated enormous protest from non-governmental organizations, farmer’s lobbies and various local groups. The IPR conflict between the North and the South is important in that it is one area in which developing nations have put up stiff opposition, and have even attempted to evolve international changes to suit their interests. Developing nations are being forced to increase IPR protection to meet the demands of industrialized nations. However, developing nations are attempting
to modify the IPR regime to assert their rights by demanding recognition of information resources which they possess. The attempts by the North and the South to promote their views on property rights over information have resulted in large-scale changes in the international sphere.

This study analyzes the conflict between two of the nations leading the North-South competition over IPRs, India and the United States. The most controversial form of IPRs, namely patents, will be the focus of the study. US attempts to increase patent laws have created enormous resistance in India. The study tries to understand why this complex issue has caused opposition from such varied groups in India stemming from the local level. This study argues that US pressure on India to increase patent protection is leading to changes in India’s view of ownership rights over information. US attempts to coerce India to grant higher standards of patent protection is gradually causing India to change its patent laws, while simultaneously leading India to evolve policies to protect its rights. India is shifting its view of resources which India possess. The shift is occurring in viewing genetic resources and traditional knowledge as “common heritage” to one of sovereign rights. In other words, India is changing from a view held that these resources were public to one that views them as the sovereign property of nations. India and other developing nations were able to revise the international regime governing genetic resources and traditional knowledge to protect their interests. This study attempts to evaluate how India, along with other developing nations, was able to bring about this change at the national and global level.

This study raises the following questions: Why did US policy on patents create such resistance in India? Why and how is it leading to changes in India’s
to modify the IPR regime to assert their rights by demanding recognition of information resources which they possess. The attempts by the North and the South to promote their views on property rights over information have resulted in large-scale changes in the international sphere.

This study analyzes the conflict between two of the nations leading the North-South competition over IPRs, India and the United States. The most controversial form of IPRs, namely patents, will be the focus of the study. US attempts to increase patent laws have created enormous resistance in India. The study tries to understand why this complex issue has caused opposition from such varied groups in India stemming from the local level. This study argues that US pressure on India to increase patent protection is leading to changes in India's view of ownership rights over information. US attempts to coerce India to grant higher standards of patent protection is gradually causing India to change its patent laws, while simultaneously leading India to evolve policies to protect its rights. India is shifting its view of resources which India possess. The shift is occurring in viewing genetic resources and traditional knowledge as "common heritage" to one of sovereign rights. In other words, India is changing from a view held that these resources were public to one that views them as the sovereign property of nations. India and other developing nations were able to revise the international regime governing genetic resources and traditional knowledge to protect their interests. This study attempts to evaluate how India, along with other developing nations, was able to bring about this change at the national and global level.

This study raises the following questions: Why did US policy on patents create such resistance in India? Why and how is it leading to changes in India's
policy? How is India protecting its interests by initiating changes internationally? The hypotheses being explored in the study are: 1) US patent policy is leading to changes in India’s view of ownership rights over information 2) India and other developing nations were able to revise the “common heritage” regime due to the impact of ideas that enabled developing nations to redefine their interests.

Background

The controversy between developing and developed countries over IPRs stems from their differing perceptions, needs, and resources. Industrialized nations, who are net exporters of technology, want to secure greater IPR protection for their inventions and are therefore attempting to increase global IPR protection in all fields of technology. Developing nations, who are generally net importers of technology, resist such changes, as greater IPRs would raise the price of information. Whereas developed nations are interested in maintaining their competitiveness in the world economy through greater IPRs, developing nations focus on economic development and want to ensure access to technology and lower costs. Developing nations claim that stronger IPRs may restrict their ability to gain transfer of technology, while advanced nations argue that without adequate IPRs, investment and transfer of technology cannot take place. Industrialized nations have expertise in biotechnology and other areas which can benefit from IPR protection. Developing nations, on the other hand, are rich in genetic resources and traditional knowledge, which are the raw materials for fields such as biotechnology, but cannot be protected under IPR laws. The varying systems of
IPR protection, their differing approaches to economic growth, and their ideological perception regarding the public/private distinction concerning ownership rights over information, are factors that have led to the divide between developing and developed nations over IPRs.

Patents are the form of IPRs that have generated the greatest debate between developing and developed countries. Intellectual Property Rights come in various forms including copyrights, trademarks, etc. Patents are a form of IPRs that protect industrial inventions that grant the inventor the right to exclude others from making, using or selling his/her invention for a limited period. The history of patents dates back to the 14th century when “Letters Patent” (meaning an open letter) were granted by European monarchs to encourage local industry and confer privileges. The first patent statute is said to have been enacted in Venice in 1474. Today most countries have patent laws to reward and encourage inventions. The controversy over patents concerns the subject matter and scope of protection. The United States grants patents over almost all fields including plants, microorganisms, genes and other living matter. India and several other countries have restricted the field of patentability. The United States demands that all countries increase patent protection, while India and other developing countries are resisting such changes.

The dispute between the United States, the technological leader of the information economy, and India, the most vociferous opponent of US IPR policies, reveals the complex nature of contentions over intellectual property. The United States, accusing countries such as India of fostering “piracy” (copying of US technology and ideas), has recently initiated large-scale changes worldwide in the
field of intellectual property. The US has ensured that other countries increase protection of intellectual property, both through bilateral measures and multilateral agreements such as NAFTA. In 1994, the US was able to conclude the most far-reaching international treaty on intellectual property, known as TRIPs (Trade Related Intellectual Property Rights Agreement) as part of the Uruguay Round Final Act of GATT. TRIPs, signed by over hundred countries, is administered by the World Trade Organization.

India has led the developing country protest against US moves to increase intellectual property protection, and was the foremost opponent of TRIPs. India has voiced the needs of developing countries to establish their own systems of intellectual property rights keeping in mind the imperative of economic development. India has also been vociferous in pointing out the lacunae in intellectual property laws that do not recognize “indigenous knowledge” and genetic resources. India, along with other developing nations, blames the US for engaging in “bio-piracy”, i.e., utilization of indigenous knowledge and resources existing in developing nations without compensation. A host of issues regarding sovereignty, culture and nationalism have been raised in the debate. India, along with other developing nations, in 1992, concluded an international agreement known as the Convention on Biological Diversity to protect their interests in the field of ownership rights over biological information. The United States has been antagonistic to the treaty and has not ratified it. India and the US are engaged in a heated debate over how to define the content and scope of property rights over information.
One of the main areas of debate between the US and India concerns patent protection of biotechnology. Biotechnology is the field in which both the "piracy" and "bio-piracy" issues are being raised. The United States wants India to grant product patents in biotechnology, and accuses India of fostering "piracy". India claims that it is the US which engages in "bio-piracy" through biotechnology as genetic resources are the raw material of this industry. India does not grant product patents in biotechnology and has no system of protection for plant varieties. The United States is promoting greater patent protection of biotechnology worldwide. Patents were not applicable to plant varieties anywhere in the world before 1930, and other living matter was not within the purview of any IPR system until 1970. Patents were granted for inventions relating to industrial applications. It was the United States that took the lead in including life forms within the scope of IPRs. New techniques in biotechnology (genetic engineering and other techniques manipulating living organisms), enabled greater commercial exploitation of living matter and led to demands for including such products under IPR protection. Two forms of IPRs are relevant for biotechnology: patents and plant breeder's rights (PBRs). Plant Breeder's Rights enable breeders to exclude others from producing or commercializing plant varieties. PBRs are less stringent than patents allowing for breeder's exemption (use of material for creating new varieties) and farmer's privilege (farmers can save seeds of the protected variety). The UPOV Convention (International Convention for the Protection of New Plant Varieties) is the international agreement on PBRs. The revision of the Convention in 1991 has brought PBRs much closer to patents. This study focuses specifically on patent protection of agricultural biotechnology.
Although PBRs and patents will be looked into, the emphasis will be on patents as international trends are moving towards patents for biotechnological inventions.

**Limitations Of The Study**

The field of intellectual property rights is rapidly changing with new developments occurring almost on a day-to-day basis. One limitation of this study is the inconsistency that may arise while trying to capture phenomena that are taking shape currently. Another limitation is that this study focuses purely on the demand side and does not deal with the supply side of the issue. It is not an attempt to evaluate the economic effects of IPRs on trade, technology transfer or development. Rather, the aim of the study is to understand what the actors want and how they are devising mechanisms to achieve their goals. The study does not provide a legal or economic analysis of the patent conflict between the US and India. The study is intended to be an examination of how global conflicts over intellectual property rights are becoming a part of international relations. Although the focus of the study is on patent protection of agricultural biotechnology, a broader view of intellectual property rights has been adopted to comprehend the dynamics of the controversy between the US and India.

**Contribution to Literature**

Intellectual Property Rights are a relatively unexplored field of study. The majority of the research on the issue focuses on the economic or legal aspects of IPRs. International relations experts and political scientists have not given much
importance to the issue. A study of the changes taking place from an international relations perspective is important for analyzing how nations are bargaining in the international arena to protect their interests in the area of ownership rights over information. The study also reveals the significance of non-state actors in the field. The gradual integration of developing nations into the intellectual property regime promoted by advanced nations, along with the ability of developing nations to evolve some changes to protect their concerns are significant developments that require analysis. It will enable us to understand how developing nations are coerced into changing policies, how they resist, and how they are able to evolve alternate strategies.

Chapter Organization

The study is divided into five main chapters. The first chapter outlines the theoretical framework that will be applied to the study.

Chapter II begins by focusing on the US policy on IPRs. It will analyze the ideological basis of US view of intellectual property and why this is being promoted internationally. It will look into how the US developed its patent system and the forces that led to its expansion domestically and globally.

The third chapter attempts to understand India’s patent policy and why it differs from the US policy. It explores the factors that led to controversy between the US and India on the issue of patents. The chapter tries to analyze how the US exerted pressure on India to change its patent policy and how and why India attempted to resist the change.
Chapter IV studies India’s criticism of US patent policy on the issue of “bio-piracy”. It attempts to understand why the patent issue had such an impact on India due to the perception that the US was stealing India’s resources. It focuses on the neem, haldi, and basmati patent conflicts between the US and India.

The fifth chapter presents the changes taking place in India due to US patent policy. It focuses on how India is altering its view of ownership rights over information. It studies the changes occurring on two levels: 1) a change in patent laws to meet US demands 2) a change in viewing genetic resources and traditional knowledge as sovereign rights rather than “common heritage” as a means of asserting India’s interests.

A concluding chapter sums up the study and tries to draw relevant conclusions.