FARMERS' RIGHTS UNDER INTERNATIONAL LAW: A STUDY OF BASIC ISSUES

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DECLARATION

I declare that the dissertation entitled "FARMERS' RIGHTS UNDER INTERNATIONAL LAW: A STUDY OF BASIC ISSUES" submitted by me for the award of the degree of Master of Philosophy of Jawaharlal Nehru University is my own work. The thesis has not been submitted for any other degree of this University or any other university.

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CERTIFICATE

We recommend that this dissertation be placed before the examiners for evaluation.

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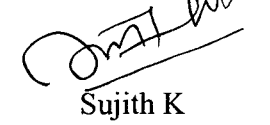

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ACRONYMS

CBD: Convention on Biological Diversity

CPGR: Commission on Plant Genetic Resources

EC: European Community

FAO: Food and Agriculture Organization

GPA: Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture

ILM: International Legal Materials

IPRs: Intellectual Property Rights

UPOV: International Convention for the Protection of New Varieties of Plants

PBRs: Plant Breeders' Rights

PGR: Plant Genetic Resources

SMTA: Standard Material Transfer Agreement

TKDL: Traditional Knowledge Digital Library

TRIPS: Agreement on Trade Related Intellectual Property Rights

UNCED: United Nations Conference on Environment and Development

UNDP: United Nations Development Programme

UNTS: United Nations Treaty Series

WTO: World Trade Organization

CHAPTER 1

INTRODUCTION

Chapter 1

INTRODUCTION

1.1 Introduction

The evolution of farmers' rights as a legal concept could be regarded as relatively new in international law. The impetus for this evolution could be mainly attributed to the intellectual property rights (IPRs) regime that came through the Agreement on Trade Related Intellectual Property Rights (TRIPS), an agreement under the auspices of the World Trade Organisation (WTO).

The TRIPS agreement expressly provides for plant variety protection. As per the TRIPS agreement member countries are required to provide protection for new plant varieties. The plant variety protection as promoted under the IPR regime recognises only the modern knowledge and technologies. In the case of crop genetic resources the idea of plant variety protection covers mainly new plant varieties produced with the help of model science and technology. Farmers' contributions and roles related to crops genetic resources and agricultural biodiversity are almost completely neglected under this framework.

Hence, the evolution of IPRs in crop genetic resources and its implications on farmers and traditional farming practices could be considered as the background of farmers' rights. Even though the evolution of the IPR regime was the immediate impetus for the evolution of farmers' rights, major developments towards the conceptualisation of farmers' rights were occurred under the auspices of Food and Agricultural Organization (FAO).

The evolution of farmers' rights within such agencies as FAO should be regarded as an attempt to balance or resist the expansion of private property rights regime on crop genetic resources promoted specifically through the TRIPS regime. Broadly, the evolution and concretisation of farmers' rights could be considered as a part of

resistance against the western notion of science, knowledge and property and the western hegemony based on knowledge (Drahos and Braithwaite 2003).

It suffices to state that the concept of farmers' rights as it is evolving under international law seeks to recognise and assert the past, present and future contributions of farmers and farming communities. It further seeks to recognise the rights of farmers and farming community to share benefits that arise out of their knowledge and contributions. Most importantly, the idea of farmers' rights seeks to recognise and preserve the traditional practice of sharing of knowledge and resources.

In a broader sense, farmers' rights could also be discussed in various aspects other than crop genetic resources. For instance, rights over cultivating land and water are critical issues in this regard which farmers' organisations essentially argue for.[1] The focus of this study, however, is limited to identifying scope and extent of farmers' rights as incorporated under the contemporary international law, that is, the rights of farmers related to and over their genetic resources, knowledge and technology.

Legal conceptualisation of farmers' rights has taken a formal shape mainly after the adoption of the International Treaty on Plant Genetic Resources for Food and Agriculture (hereafter the 'FAO Treaty') in 2001. The FAO Treaty entered into force in 2004. India is a party to this Treaty. The Indian law on the subject is essentially attributable to the Protection of Plant Varieties and Farmers' Rights Act of 2001.

The FAO Treaty can be appreciated as a landmark in the evolution of farmers' rights under international law. This is mainly because this is the only multilateral treaty which explicitly mentions farmers' rights. At the same the FAO Treaty is not a comprehensive framework addressing farmers' rights at the international level. In fact, there are several grey areas which require further clarification. Moreover,

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[1] A Charter of Farmer's Rights (1993) was drawn up by leaders of farmers' organisations as well as environmental, health and consumer groups participating in a consultation workshop on Biodiversity, Farmers' Rights and Intellectual Property Rights which tends to broaden the scope of farmers' rights to include all major related aspects such land and water. *See* the Charter of Farmers' Rights (1993), [Online: web] Accessed 10 May 2009, URL: http://www.foodandfarm.org/library.cfm?refID=29551.

farmers' rights are addressed indirectly under at least a couple of other multilateral treaty regimes.

The FAO Treaty neither provides a definition of the concept as such nor does it provide any specific ways and means through which farmers' rights to be implemented. The FAO Treaty simply serves the purpose of a formal, but loose and ambiguous recognition of farmers' rights, that too in a broad manner and in a less assertive language. This has been highlighted as an important concern which might affect the implementation measures at the national level. For instance, Anderson observes that: "...implementing measures pertaining to farmers' rights without a consistent understanding of the concept may create more problems for farmers than it solves" (Anderson 2005a).

There could be a number of reasons for the deficiencies in conceptualising farmers' rights under the FAO Treaty. Firstly, an examination of the historical context in which the concept of farmers' rights has been evolved might give an explanation, to some extent, as to the reasons for this indeterminacy. At least, such an examination would explain whether the indeterminacy and conceptual ambiguousness was a deliberate result or due to the inherent weakness of the nature of the concept itself.

The second issue that seems to be affecting continuously the conceptual clarity and strength of farmers' rights is the issue of 'regime complex'. The term 'regime complex' indicates the presence of multiple regimes and institutions where the legal concept of farmers' rights is being discussed or negotiated. As a consequence of this, a number of norms have been developed under different regimes in international law having direct link with the concept of farmers' rights. Such norms include the principle of access and benefit sharing, intellectual property rights, state sovereignty over natural resources and protection of traditional knowledge. These concepts further tend to influence the normative contents and practical measures that are needed for the realisation of farmers' rights at the domestic level.

The third issue that has received little attention in conceptualising farmers' rights is the link between farmers' rights on the one hand and food security and the human right to food on the other. Both farmers' rights and right to food are complementary

to each other. One is an essential input for the realisation of the other.[2] However, the language of human right to food has hardly been raised as a rationale for farmers' rights. This approach, if applied, has the capacity to broaden and strengthen the basis of the legal concept of farmers' rights.

The understanding of the limitations of the concept of farmers' rights and its reasons would be critical and it would also contribute significantly to the process of domestic implementation measures. This is particularly relevant in the Indian context because the Indian legal system expressly recognises farmers' rights borrowing it essentially from international law.

The issue of 'regime complex' could also be seen in the Indian legal system. Farmers' rights are addressed directly or indirectly under two statutory frameworks in India - the Protection of Plant Varieties and Farmers' Rights Act of 2001 and the Biological Diversity Act, 2002. Indeed, these statutes incorporate key principles such as access, benefit sharing and sovereign rights over natural resources. It needs to be noted that these statutes have been enacted as a response to international obligations. India is also a party to several key international human rights instruments. Most important instrument in this regard is the International Covenant on Economic, Social and Cultural Rights, 1966 (ICESCR) which places obligation upon the member countries to take measures for the progressive realisation of human rights including right to food. Therefore, the duty to strike balance between obligations arising out of different fragments of international law comes into play and places a duty to forge tools and strategies to set priorities among obligations.

1. 2 Objectives

This dissertation aims to examine the concept of farmers' rights under international law and Indian legal system. It further seeks to analyse critically the concept of farmers' rights as envisaged under international law and Indian laws. It is also an

[2] Commission on Human Rights, in one of its document stated that "...Whereas commercial interests have recourse to rights such as IPRs, farmers typically have no formal rights and no protection associated with their activities. Farmers' rights should be given attention by the human rights community and promoted in the continued promotion of the right to food, since our future food supply and its sustainability may depend on such rights being established on a firm footing" (Commission on Human Rights 1999).

objective of this dissertation to highlight the pros and cons in the conceptualisation of farmers' rights under international law and its consequential effect on the Indian legal system. This dissertation also aims to make an enquiry into further options that are available to strengthen the concept of farmers' rights in a developing country context.

1.3 Research Questions

This dissertation proposes to address the following research questions:

- Does Farmers' Rights exist under international law? If yes, what is its scope and applicability in the context of multilateral treaty regimes?
- What are the key issues related to the conceptualisation and implementation of farmers' rights under international law?
- What is India's legal and policy approach in the implementation of farmers' rights within its domestic legal framework?

1.4 Chapterisation

This dissertation consists of six chapters including this introductory chapter and the concluding chapter. The introductory chapter attempts to contextualise and rationalises the study. The introductory chapter further explains the focus and limitations of the study. Second chapter titled "Concept of Farmers' Rights: Historical Roots" traces the origin and development of the concept of farmers' rights under international law. This chapter explains the historical roots of the concept of farmers' rights under international law with special emphasis on the International Treaty on Plant Genetic Resources for Food and Agriculture, 2001.

Having explained the evolution of farmers' rights at the international level, the third chapter titled "Multilateral Treaty Regimes and Farmers' Rights" analyses farmers' rights as provided under various multilateral treaties. Since the International Treaty on Plant Genetic Resources for Food and Agriculture, 2001 is the only multilateral treaty which expressly addresses farmers' rights under international law, this chapter first analyses the nature and scope of farmers' rights under this treaty. With regard to

other related multilateral treaty regimes linked to farmers' rights, this chapter adopts a method of analysing key aspects of farmers' rights addressed under these multilateral treaty regimes.

Fourth chapter titled "Farmers' Rights and Developing Countries" explores the options available for developing countries under the existing multilateral treaty regime to strengthen the legal concept of farmers' rights. This chapter captures some of the key legal issues such as human rights and property rights aspects that are generally missing in the conceptualisation of farmers' rights under the contemporary international law. These legal issues are presented as the possible legal tools for developing countries to strengthen farmers' rights in a manner suitable to their concerns and interests.

Fifth chapter examines farmers' rights regime in India. Analysis of farmers' rights in India is done by relying upon two major statutory frameworks related to farmers' rights – the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Biological Diversity Act, 2002. This chapter further examines some of the ongoing developments having potential implications on farmers' rights.

Final chapter is the concluding chapter which essentially recaptures the key arguments and observations made in the preceding chapters. This chapter also highlights the probable ways to strengthen farmers' rights in a developing country perspective.

CHAPTER 2

EVOLUTION OF FARMERS' RIGHTS

Chapter 2

EVOLUTION OF FARMERS' RIGHTS

2.1 Introduction

The concept of farmers' rights has been a subject matter of discussion at the international level at least since the adoption of the International Undertaking on Plant Genetic Resources, 1983. However, the legal conceptualisation of farmers' rights at the international level reached a decisive stage with the adoption of the FAO Treaty in 2001. The term farmers' rights found a place in a legally binding international agreement for the first time through the FAO Treaty. However, the FAO Treaty is not the only source for creating legal basis for farmers' rights under international law. There are other multilateral treaty regimes having linkages with farmers' rights such as the Convention on Biological Diversity, 2002; International Convention for the Protection of New Varieties of Plants, 1961 revised in 1972, 1978 and 1991 and the TRIPS Agreement. In this backdrop, this chapter traces the trajectory of the legal conceptualisation of farmers' rights under international law.

2.2 Meaning of Farmers' Rights

The farming communities across the world have been following, since time immemorial, the practice of sharing of knowledge and resources. Sharing of seeds among farmers, for example, constitutes perhaps the most important part in these traditional agricultural practices (Brush 1992). As such hitherto there was no legal interference with this practice of free flow of knowledge and resource, both at the national and international level. From a legal angle, it could be said that there was no well defined property right regime regulating or controlling plant genetic resources. Reasons for this could be either there was no need for a formal legal articulation of private property rights or absence of such a regime was considered as beneficial to farmers and farming communities and to the society as a whole (Cottier 1998: 561, 562). Indeed the free flow of knowledge and resources has claimed to

have produced immense results in the enhancement of food production and thereby achievement of food security (Brush 2007; Fowler et al 2001; Jacoby and Weiss 1997).

A shift in this scenario has been mainly triggered by the development of agricultural biotechnology. The development in the field of agricultural biotechnology has resulted in the unprecedented growth of commercial seed production in the developed countries. This development has been complemented and supported by the development of private property rights regime vis-à-vis plant genetic resources. The concept arose in this context was plant breeders' rights (PBRs). The concept of PBRs refers to private property rights over plant genetic resources developed by commercial breeders. Generally, the legal consequence of PBRs is that the genetic resources or seed protected by the PBRs can be used only with the proper authorisation of the right holder. Any kind of unauthorised use will attract legal action against the user.

The evolution of PBRs can be traced at the international level to the International Convention for the Protection of New Varieties of Plants, 1961 (UPOV Convention, 1961). The concept of PBRs has been further strengthened through revision of the UPOV, 1961 more than once and the latest version being the UPOV Convention, 1991.[3] The concept of patent right as enshrined under the TRIPS also seeks to bring about similar legal consequences as that of PBRs.

The development of commercial breeding industries triggered a significant shift from the traditional practice of exchange of resources and knowledge. The traditional practice of in-farm conservation and development of crop genetic resources has given way, at least to some extent, to the commercial production of seeds. The significant issue, from the legal angle, is the development of a legal framework to protect the interests of commercial breeders, while the traditional farming practices and contributions of farmers have received hardly any legal recognition and protection. This scenario raised a plethora of legal issues related to

[3] The Convention was adopted in Paris in 1961 with the objective of providing protection to new plant varieties. For a brief analysis of the UPOV Convention, 1961 and its revised versions, *see* Chiarolla 2006.

equity, food security, right to livelihood, right to food and protection of agricultural biodiversity.

Primarily, it is this asymmetry in recognising the rights of farmers and farming community at par with the rights of commercial breeders that form the major rationale behind the legal concept of farmers' rights (Correa 2000: 3). In addition to that, formal recognition and protection of farmers' rights could be seen as vital for achieving food security. Farmers' rights could also be seen as critical for the realisation of human right to food. The language of human rights has additional relevance because sustainable agriculture is critical for the right to livelihood of the subsistence farmers and farming communities particularly in developing countries.

Environmental concern could also be considered as a driving factor behind the promotion of farmers' rights. This is primarily based on the role of farmers in conserving, protecting and improving agricultural biodiversity. It has been observed that agricultural biodiversity contributes directly to the livelihood of a large segment of human kind by being the basis for all human consumption, for world food security and for sustainable agriculture (Mbote and Cullet 1991: 261). It is in this background that the idea of farmers' right has been developed under international law.

The idea of farmers' rights denotes in simple terms the rights of farmers over their resources and knowledge. The term 'resources and knowledge' can have wide meaning and scope in common parlance. It may encompass a number of concerns related to all important factors of agricultural production such as land, water, seeds, traditional agricultural practices, harvest and traditional agricultural knowledge.

However, the contemporary international law does not address all these aspects of farmers' rights. In fact, farmers' rights as an international legal norm have defined boundaries. Broadly there are two major issues which are addressed by the concept of farmers' rights under international law. They are: plant genetic resources and traditional agricultural knowledge. The term 'plant genetic resources' consists of seeds, plants and plant parts useful in crop breeding, research or conservation for their genetic attributes (Kennedy 2006: 2). The term 'traditional agricultural

knowledge' generally refers to knowledge regarding a particular crop with desired characteristics and the environment suitable to such crops (Brush 2005).

The context in which the legal norm of farmers' rights has been evolved at the international level seems to provide an explanation for this limited scope. As mentioned earlier, the idea of farmers' rights has taken its roots from the linkages that developed between intellectual property rights regime and agriculture. The development of intellectual property rights regime in this regard was mainly focused on plant genetic resources and knowledge associated with it. Having begun primarily as a counter balance strategy against the development of intellectual property rights, farmers' rights were also evolved as a legal norm addressing rights of farmers in plant genetic resources and knowledge.

Hence, the broad objectives of farmers' rights can be briefly summarised as follows:

- Recognition and protection of the rights of farmers and farming communities over their plant genetic resources and knowledge related to it. The basis of this legal recognition and protection is the fact that farmers and farming communities have been preserving and improving these resources and knowledge system for generations.
- Regulation of the appropriation of genetic resources and knowledge preserved by farmers. An important consequence of this regulation is the power to authorise appropriation. The system of authorisation opens the possibility and viability of the right to share benefits arising out of the use of resources and knowledge.
- Preservation of traditional farming practices which include the freedom to use, exchange and sell farm saved seeds. The importance of this objective is to ensure that these traditional agricultural practices are not curtailed by any other legal regimes particularly the intellectual property rights regime.

2.3 Rationale for Recognition of Farmers' Rights

The rationale for the recognition of farmers' rights under international law and domestic law are usually based on three pillars, namely:

- Equity;
- Conservation of agricultural diversity; and
- Preservation of farmers' practices (Srinivasan 2003; Correa 2000).

2.3.1 Equity

The notion of equity as a rationale for the legal recognition of farmers' rights comes into forefront in the specific context of the development of agricultural biotechnology increasingly protected and facilitated by the intellectual property rights regime. The argument in this regard is mainly based on the fact that one of the major inputs to the modern agricultural biotechnology essentially comes from the enormous effort undertaken by farmers and farming communities in different parts of the globe for several centuries. Hence, it is argued that, while the modern commercial breeders are benefited from the legal system, the historical efforts of farmers go unrewarded (Cullet 2009).

This fundamental asymmetry can be further translated into an issue of non-convergence of basic regulatory framework between the developed and developing countries. At the global level, developing countries are the major contributors of basic plant genetic resources or genetic materials for the modern biotechnology based research and commercial production of plant varieties. Developed countries, on the other hand, are the major producers of technologically induced new plant varieties. In this context, it can be argued that developed countries, which are poor in basic genetic resources, receive substantial gains from the resources conserved, protected and improved by the developing countries.

In sum, the equity considerations requires that traditional farmers (and broadly developing countries in a North-South context) should receive a fair share of

benefits arising from the use of their plant genetic resources which are conserved and preserved over centuries.

2.3.2 Conservation of Agricultural Diversity

Agricultural biodiversity could be defined as that part of biodiversity that feeds and nurtures people. It includes genetic resources for food and agriculture such as harvested crop varieties, livestock breeds, fish species and non-domesticated resources within field, forest and in aquatic ecosystem (Kameri-Mbote and Cullet 1999). One of the important contributing factors towards the conservation and improvement of agricultural biodiversity is the farming practices found within the centres of diversity. Indeed, traditional farming practices are diversity oriented and farmers enrich biodiversity through their activities such as selection and improvement of seeds.

The significance of agricultural biodiversity lies in the fact that it contributes directly to the livelihood of a large segment of human kind and constitutes the basis for all human food consumption and for food security. Despite the significance of agricultural biodiversity for basic human needs and existence little attention has been paid in the past to conserve and protect agricultural biodiversity. This has resulted in the increasingly declining condition of the agricultural biodiversity (Kothari 1994). The homogenisation of agricultural production largely promoted by the technically induced plant varieties is one of the major highlighted reasons for this decline. For instance, green revolution varieties have been observed as one of the significant reasons for the decline of agricultural biodiversity (Adi 2006; Bjørnstad 2004).

Having noted the significant role of traditional farmers and traditional farming practices in maintaining agricultural biodiversity, the concept of farmers' rights could be justified as a systematic tool to support and facilitate the conservation activities undertaken by traditional farmers. (Srinivasan 2003: 422). Hence, the formal recognition of farmers' rights could contribute significantly towards the attainment of the long term objectives of sustainable agriculture and food security.

2.3.3 Preservation of Farmers' Practices

Preservation of farmers' traditional practices could be considered as a strategic resistance against the increasing application of the private property right regime in the case of plant varieties. The underlying reason is the possible implications of the private property right regime upon farmers and broadly its social and environmental implications.

The private property regime vis-à-vis plant genetic resources as developed under international law over the last few decades tends to promote the perpetual dependence of farmers upon commercial breeders. The transaction of commercial varieties is essentially market based. This would likely to threaten the livelihood of farmers who extensively depend upon farm-saved seeds, which is less expensive. Further, the commercialisation of seed production has the potential to exacerbate the rural poverty in developing countries. The expansion and application of IPRs to plant varieties has further been criticised as contrary to the traditional farming practices that historically did not regulate seed production (Borowiak 2004).

Another implication of protecting the private property rights of commercial breeders is the possibility of legal action against farmers for violation of private property rights such as patents and PBRs. Given the asymmetry in the capability of fighting cases between poor farmers in developing countries and big multinational corporations, it is unlikely to deliver justice. The recent *Schmeiser case* (*Monsanto Canada Inc v. Schmeiser*, Supreme Court of Canada, Judgement of 21 May 2004) in Canada, perhaps, would be a good example to explain the worst scenario of legal action against farmers by big agri-science corporations.

In *Schmeiser case*, Monsanto brought a legal action against Schmeiser for infringement of their patent right on a particular variety. Monsanto argued that Schmeiser had infringed their patent right by using and reproducing their protected variety. The Supreme Court of Canada found that Schmeiser had violated the patent right even though Schmeiser had never purchased seeds from Monsanto. *The*

Schmeiser case, therefore, points to the possibility of the worst scenario of legal action against farmers even for reasons beyond their capacity and knowledge.[4]

In this context, recognition of farmers' rights under international law could be justified as a counter-balance against the strong private property rights of commercial breeders. The underlying idea is to protect the rights of farmers to save, exchange and sell farm saved seeds.

Indeed, these rationales could be found, both explicitly and implicitly, in international documents relevant to farmers' rights, particularly the International Undertaking on Plant Genetic Resources, 1983 and the FAO Treaty. The Preamble of the FAO Treaty acknowledges or recognises these rationales. For instance, it affirms that "the past, present and future contributions of farmers in all regions of the world, particularly those in centres of origin and diversity, in conserving, improving and making available these resources, is the basis of farmers' rights". The Preamble further affirms the right to fair and equitable sharing of benefits arising from the use of plant genetic resources as a fundamental to the realisation and promotion of farmers rights.

2.4 Development of the Concept of Farmers' Rights

The concept of 'farmers' rights' was formally introduced into a binding multilateral instrument at the global level through the International Treaty on Plant Genetic Resources for Food and Agriculture, 2001 (hereafter the 'FAO Treaty').[5] The FAO Treaty expressly recognises farmers' rights. However, it cannot be asserted that the idea of farmers' rights at the international level emerged with the FAO Treaty. The concept of farmers' rights had evolved in a historical context preceding the FAO Treaty. In fact, the legal conceptualisation of farmers' rights through the FAO Treaty owes significantly to the prior historical context particularly the development

[4] A brief discussion on the *Schmeiser case* is provided in Chapter 4.

[5] The International Treaty on Plant Genetic Resources for Food and Agriculture (FAO Treaty) was adopted at the thirty first session of the FAO conference in November 2001 through resolution 3/2001. The FAO Treaty entered into force in 29 June 2004. As on 20 May 2009, 120 countries are parties to the FAO Treaty. India is also a part to this treaty. India has ratified the FAO Treaty in 10 June 2002.

that occurred under the auspices of the Food and Agricultural Organization (FAO) at least since the early 1980s.

The idea of farmers' rights was primarily raised to highlight the valuable but unrewarded contributions of farmers to plant genetic resources for food and agriculture (Andersen 2005: 2). This could also be seen as a counter move against the increased demand for the protection of the interests of commercial plant breeders. Hence, the major focus of the arguments in favour of farmers' rights was to highlight the fact that the farmers' contributions for centuries in the selection and conservation of crop genetic resources are the foundation of modern plant breeding. This rationale, obviously, takes it further to the critical issues of the legal protection of the traditionally following practices of farmers and the right to share benefits arising out of their past contributions.

2.4.1 International Undertaking on Plant Genetic Resources

The development of the legal concept of farmers' rights could be traced back to the International Undertaking on Plant Genetic Resource, 1983 (hereafter the 'International Undertaking').[6] The International Undertaking was adopted with the objective of ensuring free access to plant genetic resources. The cardinal principle of the International Undertaking was that genetic resources are a common heritage of mankind and consequently should be available without restriction.[7] The International Undertaking, as it was originally adopted, does not address the issue of farmers' rights. However, the relevance of the International Undertaking lies in the fact that it is this document that has triggered the debate on private property rights in crop genetic resources and the subsequent formulation of the concept of farmers' rights under international law (Andersen 2005: 3).

[6] The International Undertaking on Plant Genetic Resource was adopted by Resolution 8/83 at the Twenty Second Session of the FAO Conference held in Rome in 1983. The full text of the document is available at URL: ftp://ftp.fao.org/ag/cgrfa/iu/iutextE.pdf.

[7] *See* International Undertaking, Article 1.

2.4.2 Commission on Plant Genetic Resources

The Commission on Plant Genetic Resources (hereafter 'the CPGR') was also established at the same conference in which the International Undertaking was adopted.[8] Major functions of the CPGR included the monitoring of the operation of the International Undertaking. To push this agenda further, the CPGR constituted a Working Group in 1985.[9] The idea of farmers' rights was first addressed formally in this Working Group.

2.4.3 CPGR Working Group

The first meeting of the Working Group was held in Rome in 2-3 June 1986. In this meeting, the need for recognising and emphasising farmers' rights at par with the plant breeder's rights was expressly addressed. The Working Group emphasised that:

> "...in addition to the recognition of plant breeder's rights, specific mention should be made of the rights of the farmers of the countries where the materials used by the breeders originated. These materials were the result of the work of many generations and were a basic part of the national wealth".[10]

In its second meeting, the Working Group further expressed the need for legally constructing "farmers' rights" (FAO 1987). The Working Group expressly linked the need to articulate the legal concept of farmers' rights with the development of the legal regime for the protection of plant breeder's rights. It was further expressed that:

> "...Breeders' Rights and Farmers' Rights were parallel and complementary rather than opposed, and that the simultaneous

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[8] *See* the Resolution 9/83 adopted by the Twenty Second Session of the FAO Conference held in Rome in 1983. FAO (1983), Establishment of a Commission on Plant Genetic Resources, Resolution 9/83, 23 November 1983, URL: ftp://ftp.fao.org/ag/cgrfa/Res/C9-83E.pdf.

[9] *See* the Report of the Commission on Plant Genetic Resources, Rome, First Session, 11-15 March 1985, CPGR/85/REP.

[10] *See* The Report of the working Group of the FAO Commission on Plant Genetic Resources, October 1986, CPGR/87/3, as cited in Anderson 2005): 4.

> recognition and international legitimization of both these rights could help to boost and speed up the development of the people of the world" (Anderson 2005: 6-7).

However, these developments did not succeed in providing a concrete definition to the concept of farmer's rights.

2.4.4 FAO Resolutions 5/89 and 3/91

The constant discussion in the fora of the Working Group and the CPGR eventually led the FAO Conference to adopt a resolution on 29 November 1989 expressly recognising farmers' rights (hereafter the 'Resolution 5/89'). The Resolution 5/89 was annexed to the International Undertaking and thereby it became an integral part of the International Undertaking. The Resolution 5/89 could be considered as the first documented expression of farmers' rights at the international level and therefore can be considered as a landmark in the trajectory towards the legal conceptualisation of farmers' rights.

Salient features of the FAO Resolution 5/89 could be summarised as follows:

- Reasserts plant genetic resources as a common heritage of mankind;
- Recognises the historical contributions of farmers, especially in the developing countries in the conservation and improvement of plant genetic resources;
- Considers the need for ensuring farmers full benefit from the improved and increased use of the plant genetic resources they have preserved; and
- Endorses the concept of farmers' rights.

Even though the idea of farmers' rights was introduced as a part of the International Undertaking, the document was silent as to the ways and means through which farmers' rights are to be realised. Seemingly as a response to this, the International Undertaking was amended in 1991 by the Resolution 3/91. The Resolution 3/91 envisaged an international fund as a way to implement farmers' rights. The Resolution 3/91 explicitly endorsed that "...farmers' rights will be implemented

through an international fund on plant genetic resources which will support plant genetic conservation and utilisation programmes..." This fund never materialised.

2.4.5 Rio Conference Developments

The development of the concept of farmers' rights cannot be completely attributed to the initiatives taken by the FAO. In parallel to (or influenced by) the developments within the FAO system, the concept of farmers' rights was discussed in at least another couple of international forums. As a result, the concept of farmers' rights found room in some of the key international instruments adopted during this period. Foremost among these is the instruments adopted in the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro from 3-14 June 1992.

Out of the several outcomes of the UNCED, two key instruments are relevant to farmers' rights – the Convention on Biological Diversity (hereafter the 'CBD') and Agenda 21. Even though the CBD does not contain explicit reference to the concept of farmers' rights, it has been argued that the CBD can be considered as a relevant framework for the implementation of some components of farmers' rights, particularly the notion of benefit sharing (Correa 2000: 6). Moreover, Resolution 3 of the Nairobi Conference for the Adoption of the Agreed Text of the CBD in May 1992 identified the realisation of farmers' rights as one of the "outstanding issues" for further negotiation "within the Global System for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Sustainable Agriculture".

Agenda 21 also emphasised the need for taking further steps to realise farmers' rights. Chapter 14.60 (a) of the Agenda 21 states that the appropriate United Nations agencies and regional organisations should "strengthen the Global System on the Conservation and Sustainable Use of PGRFA (Plant Genetic Resources for Food and Agriculture) by...taking further steps to realise Farmers' Rights".

2.4.6 Global Plan of Action, 1996

Another document at the international level relevant in the farmers' rights context is the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (hereafter 'GPA'), adopted by the International Technical Conference on Plant Genetic Resources, Leipzig, Germany, 17–23 June 1996. Paragraph 32 of the GPA expressly sets the realisation of farmers' rights as defined under the FAO Resolution 5/89 at the international, regional and national level as a long term objective.

The salient features of the GPA in relation to farmers' rights could be summarised as follows:

- GPA aims to promote fair and equitable sharing of benefits arising from the use of plant genetic resources for food and agriculture;
- Recognises the desirability of equitable sharing of benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of plant genetic resources for food and agriculture and their sustainable use;
- Recognises the key roles played by farmers in the preservation and improvement of agricultural biodiversity; and
- Confirms the individual and collective rights of farmers on their genetic resources and knowledge

2.4.7 Farmers' Rights in Human Rights Instruments

International human rights law instruments do not address farmers' rights directly. However, farmers' rights were brought before human rights institutions within the United Nations system. For instance, one of the studies submitted to the Economic and Social Council of the United Nations by the Commission on Human Rights urges that "...Farmers' rights should be given attention by the human rights community and promoted in the continued promotion of the right to food, since our

future food supply and its sustainability may depend on such rights being established on a firm footing" (Commission on Human Rights 1999).

Further, the Sub-Commission on Human Rights in one of its resolution (Resolution 2000/7) noted that the intellectual property rights protection for new plant varieties will have impacts on the enjoyment of right to food. It has also been noted that the expansion of intellectual property rights in agriculture might affect the control of indigenous communities over their genetic and natural resources and cultural values (United Nations High Commissioner for Human Rights 2000).

2.4.8 Revision of International Undertaking

Failure of the International Undertaking to establish a concrete system to promote the realisation of farmers' rights seems to have been an important reason behind the move towards the revision of the International Undertaking. The adoption of the CBD also seems to have influenced the revision initiative. Both these objectives are obvious in the Resolution 7/93 adopted by the FAO conference in its twenty-seventh session in November 1993. The resolution requested the Director-General to provide a forum for negotiations among governments for:

- Adoption of the International Undertaking in harmony with the CBD;
- Consideration of the issue of access on mutually agreed terms to PGR, including ex situ collections not addressed by the CBD; and
- Realisation of farmers' rights.

Hence, it could be stated that the revision initiative was mainly for the purpose of modifying the International Undertaking particularly to make it in conformity with the CBD and for further development and concretisation of the concept of farmers' rights (Tsioumani 2006).

The potential conflict between the International Undertaking and the CBD could be best explained by mentioning the basic principle envisaged under each regime to regulate access to plant genetic resources. The International Undertaking was based upon the principle of common heritage of mankind. The International Undertaking

explicitly says that plant genetic resources are a common heritage of mankind (International Undertaking 1983: Annex I). The inevitable legal consequence of such an articulation is the availability of free access to plant genetic resources for all. At the same time, the CBD is based on the principle of state sovereignty over their natural resources (CBD: Article 3). The CBD gives authority to concerned states to regulate access to their biological resources which includes plant genetic resources. The CBD promotes a bilateral approach in regulating access to plant genetic resources.

The initiation of the revision of the International Undertaking could be considered as a starting point of the efforts towards the FAO Treaty. Negotiations were initiated in 1994 in the first extra ordinary session of the Commission on Genetic Resources for Food and Agriculture. Initially the aim was to adopt a new agreement at the Leipzig International Conference in 1996. However, the negotiation prolonged till 2001 due to lack of consensus among negotiating parties on various issues.

2.4.9 Divergent views of Developing and Developed Countries

The divergence among negotiating parties was rather apparent in matters related to farmers' rights. While some countries, mainly developing countries, argued for strong articulation of farmers' rights, some other countries (US, Japan, Canada and Australia) stood for the protection of private property rights and commercial interests and opposed to farmers' rights. One of the reasons for opposition was the apprehension that it would affect international trade through trade distorting measures to protect farmers' rights (Tsioumani 2006: 128; Bjørnstad 2004). It is a fact that among the G-77 group India, Philippines, Angola and Ethiopa stood in favour of a strong language for farmers' rights (Bjørnstad 2004: 72). At the same time, some Latin American countries preferred a regime based on bilateral framework. These countries seem to have afraid of the anxiety that farmers' rights might affect the potential commercial benefits from the transaction of plant genetic resources (GRAIN and Kalpavriksh 2002; Cottier 1998: 564).

2.4.9.a Developed Country Proposals

The FAO Treaty negotiation prolonged for seven years primarily due to the lack of consensus. It is to be noted in this context that at the third extra ordinary session of the Working Group on Farmers' Rights in December 1996 three consolidated proposals were submitted by the US, EC and the developing countries. The US proposal contained minimum reference to farmers' rights by expressing that "shall take measures to promote the efforts of their farmers to conserve and use sustainable plant genetic resources for food and agriculture". European Community (EC) (and amended by China, Japan and Australia) proposal moved little further from the US proposal in addressing the issue of farmers' rights. The EC proposal asserted the need for the recognition of the role of farmers in the sustainable use of Plant Genetic Resources for Food and Agriculture (PGRFA), fair and equitable sharing of benefits and maintenance and preservation of traditional agricultural knowledge, innovations and practices.

2.4.9.b Developing Country Proposals

Developing countries presented a proposal which sought for a wide definition of farmers' rights. Major contents of the developing country proposal were:

- Protection and promotion of the collective rights of farmers with respect to their innovations, knowledge and cultural diverse systems;
- Fair and equitable sharing of the benefits arising out of the utilisation of plant genetic resources;
- International *sui generis* system for the recognition, protection and compensation of knowledge, innovations and practices of farmers and traditional communities;
- Prior informed consent of the concerned farmers and local communities is obtained before the collection of plant resources is undertaken;
- Traditional rights of farmers and their communities to keep, use, exchange, share and market their seeds and any other

plant reproductive material, including the right to re-use farm-saved seed;

- Definition and implementation of the measures and legislation on Farmers' Rights at national and international levels; and
- To review, assess and, if appropriate, modify intellectual property rights systems, land tenure, and seed laws in order to ensure their harmony with the concept of farmers' rights (Bjørnstad 2004: 40-43).

2.4.10 FAO Treaty Adoption

The FAO Treaty negotiations included three regular sessions and six extraordinary sessions of the Commission on Plant Genetic Resources for Food and Agriculture, an informal expert meeting and six inter-sessional meetings of the Chairman's Contact Group. After seven years of negotiations, the draft of the FAO Treaty was submitted to the thirty-first FAO Conference, 2001 and adopted by a vote of 116 in favour, zero against and two abstentions.[11]

It can be seen that the initiative towards a legal framework for farmers' rights began in the early 1980s. These initiatives, particularly the debates in the FAO, ultimately led to the adoption of the FAO Treaty in 2001. The significance of the FAO Treaty is that, the concept of farmers' rights, for the first time, found express manifestation in a legally binding instrument at the international level. It should also be noted that the FAO Treaty is widely accepted by countries. As on 20 May 2009, 120 countries are parties to this treaty. India had ratified this treaty in 10 June 2002. Hence, in a legal point of view, the FAO Treaty is the foremost source in international law regarding farmers' rights.

2.4.11 Indian Position

Indian legal system has recognised the concept of farmers' rights through express legal provisions even prior to the adoption of the FAO Treaty through the Protection

[11] Japan and US abstained from voting particularly due to the potential restriction of IPRs to plant genetic resources by the farmers' rights regime. For details, *see* Hasan 2004.

of Plant Varieties and Farmers' Rights Act of 2001 (hereafter the 'PVP Act'). The PVP Act is regarded as the first of its kind anywhere in the world that recognises the contribution of farmers and farming community in the conservation of biodiversity and the development of new plant varieties (Chandrashekaran and Vasudev 2002).

The development of the concept of farmers' rights in the Indian legal system, to some extent, is analogical to the development in international law. This analogy could be established with a couple of points. First, the legal concept of farmers' rights in India is also indispensably linked to the regime of plant genetic resources. Second, the idea of farmers' rights has been developed parallel and as a counter strategy to the development of PBRs. Third, farmers' rights and PBRs have been included as integral parts of the same legal framework.

The PVP Act expressly acknowledges it as a measure taken to comply with the TRIPS obligation. However, the drafting history of the PVP Act shows that the initiatives had begun even prior to the adoption of TRIPS. The seed industries in India were a major driving force and the initial discussion towards the need for a legal framework for the protection of plant genetic resources was triggered by the organisation of seed industries in the 1980s (Dhar and Chaturvedi 2005; Ramanna and Smale 2004).

The PVP Act was originally designed for the protection of the interests of commercial breeders. The idea of farmers' rights was included subsequently as a separate chapter (Chapter VI) due to various factors such as strong demand from civil society organisations and scholars. The significant development which led to the inclusion of a separate chapter on farmers' rights was the constitution of a Joint Parliamentary Committee to look at the 1999 draft of the PVP Act (Seshia 2002).

It is to be noted in the Indian context that the PVP Act was claimed as a response to the commitment of India to the TRIPS agreement. Hence, formally the PVP Act is not linked to the FAO Treaty. Having ratified the FAO Treaty, India is obliged to set her laws in compliance with the FAO treaty. This situation points to the need for the critical process of testing the PVP Act in the light of the FAO Treaty or in a broad manner, the examination and evaluation of the efforts taken by India to comply with the FAO Treaty.

2.5 Summation

The term 'farmers' rights' under contemporary international law indicates rights of farmers over their crop genetic resources and knowledge. The idea of farmers' rights seeks to provide legal recognition and protection of past, present and future contributions of traditional farmers' and farming communities. Farmers' contributions in this regard denote contributions of farmers to the preservation and improvement of plant genetic resources and knowledge related to it. The evolution of farmers' rights at the global level was based on mainly three rationales, namely equity, conservation of agricultural biodiversity and protection of traditional farming practices.

The evolution of farmers' rights at the global level could be traced to the International Undertaking on Plant Genetic Resources, 1983. The debate on farmers' rights seems to have begun formally with the adoption of the International Undertaking. The term 'farmers' rights', resultantly, first appeared in an instrument at the international level through the FAO Resolution in 1989 which became an integral part of the International Undertaking. However, the International Undertaking did not move beyond simply recognising farmers' rights. It means, the International Undertaking failed to provide any concrete means and ways through which the idea of farmers' rights to be implemented.

The failure of the International Undertaking in this regard was one of the major reasons for initiating the revision process of the International Undertaking. The revision process started in 1994 and went on till the adoption of the FAO Treaty in 2001.

Farmers' rights were a contentious issue during the FAO Treaty negotiation. Developed countries except European Community stood strongly against the adoption of farmers' rights with side scope and meaning. At the same time majority of the developing countries argued for a strong assertion of farmers' rights in the FAO Treaty. The European Community by and large took a medium position which in fact helped the adoption of the FAO Treaty in the present form with a chapter dealing with farmers' rights. A study on the negotiation process of the FAO Treaty thus stated that "for most of the 1990s the negotiation seemingly dragged in every

direction except forward" (Bjørnstad 2004: 70). Lack of consensus among negotiating parties seems to be a major reason for the adoption of the farmers' rights provision in a vague, non-mandatory language.

The FAO Treaty is thus the most important document as it expressly recognises farmers' rights. While FAO Treaty is the only legally binding instrument at the international level in this regard, farmers' rights were also discussed or mentioned in several other international forums, most importantly the Rio Conference and in the human rights bodies under the United Nations.

The FAO Treaty is a direct source of farmers' rights under international law. At the same time it is not the only legal source of farmers' rights. FAO Treaty is only a part of the farmers' rights regime under international law. The nature, scope and implementation of farmers' rights are, in fact, determined or influenced by other regimes also, most importantly the CBD and UPOV. Hence, farmers' rights can be considered as a subject of regime complex. In this background, next chapter examines elaborately these multilateral treaty regimes addressing farmers' rights.

CHAPTER 3

INTERNATIONAL LEGAL REGIME AND FARMERS' RIGHTS

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INTERNATIONAL LEGAL REGIME AND FARMERS' RIGHTS

3.1 Introduction

There are, at least, three different but complementary international legal regimes that deal directly or indirectly with farmers' rights. Among these multilateral treaties, FAO Treaty expressly addresses farmers' rights. At the same time, multilateral treaties such as the Convention on Biological Diversity and the UPOV Convention refer to farmers' rights indirectly. In this background, this chapter will examine these legal regimes that deal with farmers' rights.

3.2 Salient Features of FAO Treaty

3.2.1 Objectives

FAO Treaty was adopted to pursue mainly two objectives; first, conservation and sustainable use of plant genetic resources for food and agriculture and second, fair and equitable sharing of benefits arising out of the use of plant genetic resources (FAO Treaty: Article 1.1). The FAO Treaty seeks to achieve these objectives by providing a multilateral system to facilitate access to plant genetic resources and sharing of benefits arising out of their use and by recognising farmers' rights (Ibid: Article 9 and 10). Hence, the key features of the FAO Treaty could be summarised as access, benefit sharing and farmers' rights.

3.2.2 State Sovereignty

The underlying principle of the multilateral access regime under the FAO Treaty is the sovereignty of states over their plant genetic resources for food and agriculture. This principle is further asserted by providing that "...the authority to determine access to those resources rests with national governments and is subject to national legislation" (Ibid: Article 9 and 10).

3.2.3 Applicability

Facilitated access to plant genetic resources envisaged under the multilateral system is not applicable to all plant genetic resources for food and agriculture. Specific limits are mentioned under the Treaty. Firstly, access is limited to plant genetic resources enlisted in Annex I. There are thirty five crop species and twenty nine forage species covered in Annex I. Access is further limited to those species that are under the "management and control of Contracting Parties and in the public domain" (Ibid: Article 9 and 11.2). Hence, plant genetic resources in the control and management of private individuals and companies, even if they are in Annex I, are not subject to the rules of the multilateral system. This means there will not be "facilitated access" to plant genetic resources under private control and management.

3.2.4 Restricted Access

Access is also restricted in terms of purposes for which plant genetic resources may be used. The FAO Treaty clearly states that "access shall be provided solely for the purpose of utilization and conservation for research, breeding and training for food and agriculture" (Ibid: Article 12.3.a). This restriction is further clarified by providing that any resources accessed through the multilateral system shall not be used for "chemical, pharmaceutical and/or non-food/feed industrial uses" (Ibid: Article 12.3.a). This exclusion of purposes not related to food and agriculture implies that access to plant genetic resources for such excluded purposes will be regulated under the CBD regime.

3.2.5 Conditional Access

Access to plant genetic resources included in the multilateral system is also subject to various conditions. These conditions include the duty of the provider to provide access expeditiously and free of charge, duty of recipients not to claim intellectual property rights and the duty of the provider to make available all passport data and other non-confidential descriptive information (Ibid: Article 12.3).

3.2.6 Benefit Sharing

FAO Treaty recognises that facilitated access to plant genetic resources under the multilateral system itself constitutes a major benefit (Ibid: Article 13.1). Nevertheless, the FAO Treaty illustrates several other means through which fair and equitable benefit sharing may be achieved. They are: exchange of information, access to and transfer of technology, capacity building and sharing of monetary and other benefits of commercialisation (Ibid: Article 13.2). However, the norms on benefit sharing are subject to intellectual property rights. For instance, it is provided that access to technologies shall be provided by respecting applicable property rights (Ibid: Article 12.2.b.i).

The mechanism of sharing of monetary benefits is designed in such a way that a recipient who commercialises a product with the help of material(s) accessed from the multilateral system is required to pay to the mechanism. This means, the FAO Treaty does not envisage a system of benefit sharing directly between parties. Benefits are intended to reach in various other forms such as conservation measures and capacity building assistance from the mechanism. This benefit sharing mechanism in the context of farmers' rights, seems to have borrowed from the International Undertaking. Because the International Undertaking considered the ensuring of conservation, management and use of plant genetic resources for the benefit of present and future generations of farmers as "the best way to implement the concept of farmers' rights" (International Undertaking 1983: Annex I, Para. 4).

It is to be noted in this context that the benefit sharing mechanism under the FAO Treaty has started functioning recently with the help of voluntary contribution mainly from Norway, Spain, Italy and Switzerland amounting to a total of US Dollar 5,81,088. The Governing Body in its third session held in Tunis, Tunisia, from 1 to 5 June 2009 approved eleven projects from different regions for funding which includes one project from India.[12]

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[12] The third session of the Governing Body has approved total eleven projects. Allocation of projects is as follows: Four from the African Region – Kenya, Morocco, Senegal and Tanzania; five from the Latin American and Caribbean Region – Costa Rica, Cuba, Nicaragua, Peru and Uruguay; one Asia – India and One from Egypt. The approved project from India has been submitted by Peermade Development Society – a non-governmental organisation situated in the state of Kerala. Major objectives of the project are Conservation, dissemination and popularization of location specific

3.2.7 Standard Material Transfer Agreement (SMTA)

The norm of facilitated access and benefit sharing is further effectuated through a material transfer agreement between a provider and a recipient.[13] The SMTA is a key tool for translating the language of the FAO Treaty into contractual obligations for recipients of materials from the multilateral system (Correa 2006). To this effect, governing body has developed a SMTA through Resolution 1/2006 of 16 June 2006. The SMTA is mandatory to access plant genetic resources included in the multilateral system. Hence, in addition to the provisions under the FAO Treaty, the access and benefit sharing will be regulated by the SMTA. Indeed, the SMTA reiterates all key norms provided under the FAO Treaty and provides rules regarding rights and duties of provider and recipient, dispute settlement and payment mechanisms available for recipients.

3.3 Definition of Farmers' Rights under FAO Treaty

Until the adoption of the FAO Treaty, the often referred definition of farmers' rights is the one provided under the International Undertaking which defines farmers' rights as:

> "...rights arising from the past, present and future contributions of farmers in conserving, improving, and making available plant genetic resources, particularly those in centers of origin/diversity. These rights are vested in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions, as well

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farmer-developed varieties by establishing village level enterprises. For details regarding other projects, *see* Approval of the First Projects under the Benefit-sharing Fund, document of the Third Session of the Governing Body held in Tunis, Tunisia, from 1 to 5 June 2009, Doc. No. IT/GB-3/09/Inf. 11, URL: ftp://ftp.fao.org/ag/agp/planttreaty/gb3/gb3i11e.pdf.

[13] Article 12.4 of the FAO Treaty states that: "To this effect, facilitated access, in accordance with articles 12.2 and 12.3 above, shall be provided pursuant to a standard material transfer agreement (MTA), which shall be adopted by the Governing Body and contain the provisions of articles 12.3(a), d and g, as well as the bene?t-sharing provisions set forth in article 13.2(d)(ii) and other relevant provisions of this Treaty, and the provision that the recipient of the plant genetic resources for food and agriculture shall require that the conditions of the MTA shall apply to the transfer of plant genetic resources for food and agriculture to another person or entity, as well as to any subsequent transfers of those plant genetic resources for food and agriculture".

> as the attainment of the overall purposes of the International Undertaking" (International Undertaking 1983: Annex II).

The definition as provided under the International Undertaking has two main features. First, it considers the contribution of farmers in "conserving, improving, and making available plant genetic resources" as the basis of farmers' rights. Second, the concept is defined in such a way that whatever rights emanating from the concept are not directly available to farmers. It is expressly stated that international community is the holder of these rights as a trustee for present and future generations of farmers.

An analysis of this definition reveals that the International Undertaking stops at recognising formally the contributions of farmers towards the conservation and development of plant genetic resources. The recognition is sought to materialise in the form of assistance for conservation of plant genetic resources. The definition provided under International Undertaking does not include any rights of farmers over their intellectual assets or traditional knowledge. It does not define any kind of ascertainable individual or collective property right over their intellectual assets. This could be the reason which prompts the critique to evaluate the International Undertaking as a document which is little more than a policy statement by the international community having very little practical impacts (Cullet 2005: 239).

However, with the adoption of the FAO Treaty, the relevance of the definition provided under the International Undertaking mostly confines to its normative importance. This is primarily because of the legal status of the FAO Treaty being a legally binding instrument at the international level. FAO Treaty is the only source in international law where the term 'farmers' rights' has been mentioned explicitly. Article 9 of the FAO Treaty expressly uses the term 'farmers' rights'.

Article 9 of the FAO Treaty states that:

> 9.1 The Contracting Parties recognize the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world.

> 9.2 The Contracting Parties agree that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmers' Rights, including:
>
> (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
>
> (b) the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and
>
> (c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.
>
> 9.3 Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.

FAO Treaty emphasises farmers' contributions for the conservation and development of plant genetic resources as the basis of farmers' rights. The FAO Treaty further rationalises the recognition of farmers' contributions by highlighting it as the basis of food and agricultural production throughout the world (FAO Treaty: Article 9.1).

The FAO Treaty adopts an approach different from that of the International Undertaking with regard to the conceptualisation of farmers' rights. The FAO Treaty follows an illustrative approach in defining the concept of farmers' rights by providing certain measures to protect and promote farmers' rights. The illustrated measures to protect and promote farmers' rights are: the protection of traditional knowledge relevant to plant genetic resources, the right to equitably participate in sharing benefits arising from the utilisation of plant genetic resources and the right to participate in decision making on matters related to the conservation and sustainable use of plant genetic resources (FAO Treaty: Article 9.2).

In addition to the illustrated measures, the FAO Treaty further recognises, in principle, the rights of farmers to save, exchange and sell farm saved seeds (Ibid: Article 9.3). This traditional practice of farmers is recognised by prohibiting the interpretation of the provisions of the FAO Treaty in such a way to limit the rights of farmers to save, use, exchange and sell farm saved seeds.

Another important feature of farmers' rights as conceptualised under the FAO Treaty is the fact that the Treaty casts the responsibility for realising farmers' rights upon national governments (FAO Treaty: Article 9.2). By saying so, the Treaty grants flexibility to the concerned state parties to forge measures to protect and promote farmers' rights according to their needs and priorities and according to their domestic legislation.

3.4 Critiquing FAO Treaty

The conceptualisation of farmers' rights under the FAO Treaty did not go much further from the International Undertaking. The only significant change introduced by the FAO Treaty in this regard is the recognition and assertion of the principle of sovereign rights over plant genetic resources. This is an apparent deviation from the International Undertaking wherein plant generic resources were considered as vested with international community.

This change in the basic legal approach cannot be completely attributed to the FAO Treaty. In fact, FAO Treaty seems to have followed the CBD in this regard. To this extent the FAO Treaty can be considered as a success because one of the objectives of the negotiation was to make the plant genetic resources regime in harmony with the CBD. At the same time the FAO Treaty cannot be considered as a complete success in another major objective, that is, the concretisation, further development and realisation of farmers' rights.

The FAO Treaty does not go much beyond recognising the term 'farmers' rights'. Article 9 of the FAO Treaty uses completely the non-mandatory language. For instance, Article 9.2 does not make it obligatory for member countries to provide legal framework to ensure protection of traditional knowledge, benefit sharing and right to participation. The obligation of member countries in this regard is diluted by using the expression "Contracting Party *should, as appropriate, and subject to its national legislation*, take measures to protect and promote Farmers' Rights" (emphasis added).

FAO Treaty casts responsibility for the realisation of farmers' rights with national governments. This means, member countries have absolute freedom to decide the

ways and means to be adopted for the realisation of the farmers' rights. This flexibility may create uncertainty as to the way in which farmers' rights are to be implemented at the national level and it may also delay the implementation process. In fact, the Governing Body of the FAO Treaty in its Resolution 2/2007 acknowledges that: "there is uncertainty in many countries as to how Farmers' Rights can be implemented and that the challenges related to the realization of Farmers' Rights are likely to vary from country to country" (FAO 2007).

Similar approach is reflected in the provision dealing with farmers' privileges also. Article 9.3 does not grant farmers the "right to save, use, exchange and sell farm-saved seed/propagating material" positively. Instead the provision adopts a different approach where in it prevents the interpretation of the FAO Treaty in such a way to limit these rights. Further, the scope these rights will be depended upon national legislation. Hence, in effect, farmer's privileges will be protected only if they are recognised and protected under concerned domestic legislation.

Hence, it could be stated that the FAO Treaty does not prescribe anything regarding farmers' rights. It only provides guidance in a limited way to the member countries on the ways through which farmers' rights may be protected.

From a developing country perspective, FAO Treaty cannot be considered as a complete success. This is particularly because, developing countries in their initial proposal raised several key concerns such as collective rights of farmers with respect to their innovations, knowledge and cultural diverse systems, prior informed consent, traditional rights of farmers to keep, use, exchange, share and market their seeds and any other plant reproductive material, including the right to re-use farm-saved seed and modification of intellectual property rights systems to ensure that they are in harmony with the concept of farmers' rights. While looking at Article 9, it is clear that these concerns of developing countries have been watered down. In this regard, Bjørnstad opined that the FAO Treaty cannot be considered as a strong breakthrough for developing countries (Bjørnstad 2004: 48).

Another major issue that arises in this context is related to the key contents of farmers' rights (Traditional Knowledge, Benefits sharing and right to participation) illustrated under Article 9. The farmers' rights provision under the FAO Treaty

(Article 9) is silent as to the nature and scope of protection to be granted to these key aspects of farmers' rights. While benefit sharing has been dealt with under Article 13, other two illustrated contents are not at all addressed under the FAO Treaty.

The scenario becomes complex given the fact that the issue of traditional knowledge and benefit sharing are still unresolved issues at the international level. These issues are subject matters of ongoing negotiations in various international forums, particularly the CBD and WIPO. Hence, it can be seen that the outcome of the ongoing efforts in the forum of CBD and WIPO will be a crucial determining factor in the realisation of farmers' rights.

It could be concluded that FAO Treaty does not conceptualise farmers' rights in an effective manner. This is particularly true in a developing country point of view. As such the FAO Treaty is unlikely to make any significant output at the level of implementation. The way in which farmers' rights have been articulated under the FAO Treaty makes farmers' rights under the FAO Treaty perhaps little more than a policy statement.

Nevertheless, FAO Treaty is a landmark in the evolution of farmers' rights under international law. The importance of the FAO Treaty is that farmers' rights have been recognised under a legally binding multilateral instrument for the first time. Though in a loose and vague manner, the FAO Treaty defines 'farmers' rights'. Further FAO Treaty provides at least some illustrative ways through which farmers' rights may be implemented. Hence, FAO Treaty is a foundation based upon which the idea of farmers' rights can be further concretized under international law.

3.5 Linkages with Other Treaty Regimes

As mentioned above the concept of farmers' rights has been developed as part of legal framework regulating plant genetic resources. The issues related to the management and regulation of plant genetic resources are a subject matter of more than one international agreement. These agreements have been negotiated in different international forums with different rationale and objectives. Rules envisaged under almost all of these regimes, directly or indirectly, address major issues pertinent to farmers' rights, that is, access to genetic resources, sharing of benefits arising out of its use and protection of traditional knowledge.

In this context, this part of the chapter proposes to examine the effect of multiple regimes on the concept of farmers' rights in three areas, namely, access and benefit sharing, farmers' privileges and the protection of traditional knowledge.

3.5.1 Access and Benefit Sharing

Access and benefit sharing have been dealt with under all regimes related to farmers' rights. For instance, the FAO Treaty primarily addresses the issue of access to plant genetic resources and envisages a multilateral system of access and benefit sharing (FAO Treaty: Article 10). The CBD also treats access and benefit sharing as one among three important objectives of the Convention (CBD: Article 1). Cumulatively both these regimes tend to promote and encourage access to plant genetic resources at global level and lay down rules and principles regulating sharing of benefits arising out of the use of plant genetic resources. The IPR regime also has linkages with the issue of access. This could be best explained by the fact that access to crop genetic resources is indispensable for inventions in the field of agriculture which can be protected with private property rights (Rosendal 2006: 431). Access is a matter of direct concern of the IPR regime in a different angle, that is, the question of access to plant genetic resources which have been protected with IPRs such as patent or plant breeders' rights.

Even though plant genetic resources are subject matters of all these regimes, the issue of access and benefit sharing is not addressed in a same or similar way. Owing to this variation, its implications on farmers' rights could also be different. This variation could be attributed to differences in the basic premise in which and objectives for which all these regimes work.

The point of variations in treating access and benefit sharing under these regimes could be explained by highlighting a number of issues, most importantly, the basic approach in which these regimes address access and benefit sharing. The development of legal framework at the international level related to plant genetic resources began with the principle that plant genetic resources are common heritage of mankind. The CBD and subsequently the FAO Treaty brought about a significant change in this basic principle by embracing the principle of sovereign rights. Both the CBD and the FAO Treaty recognise sovereign rights of every state over its own

plant genetic resources. Hence, the CBD and the FAO Treaty mark a shift from free and universal access to access regulated by concerned states.

However, the way in which access is regulated under these two regimes are not similar. Having based on the sovereign rights principle, the CBD envisages a bilateral mode of regulation. It means, matters related to access and benefit sharing will be decided between the country which provides the material and the receiver of the material. This bilateralism is evident in the key norms and procedures to be followed such as prior informed consent and mutually agreed terms (CBD: Articles 15.4 and 15.5). Whereas, the FAO Treaty envisages a multilateral system wherein facilitated access to genetic materials included in the Annex I of the treaty is available. The basic conditions upon which access is to be exercised are also mentioned in the treaty (FAO Treaty: Article 12.3). This means, in contrast to the CBD, the FAO Treaty tends to promote multilateralism. Hence, there is a significant divergence between the CBD and the FAO Treaty in the basic approach itself.

The IPR regime approaches access to plant genetic resources from a different angle. While the CBD and the FAO Treaty primarily addresses the issue of access to raw plant genetic resources, the IPR regime concerns mainly on access to worked plant genetic resources.[14] The major concern of the IPR regime is to provide legal protection to commercial breeders who undertake manipulations on the raw resources and make new varieties. Consequently, the IPR regime tends to restrict or prohibit free access to worked plant genetic resources.

The IPR regime does not as such deal with the issue of benefit sharing. The major reason for this silence is understandable given its focus on worked plant genetic resources and its rationale being the protection of plant varieties produced in laboratories working with modern science and technology. However, the idea of fair and equitable benefit sharing is closely linked to the IPR regime.

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[14] Raw PGR are those found in the wild, such as a flower in the rain forest that contains a yet undiscovered gene that could cure cancer. Worked genetic resources, by contrast, are the products derived from that flower—such as the marketed cancer fighting drug. *See* Raustiala and Victor 2004: 279.

This link could be seen in the fact that the basic objective of the principle of benefit sharing was to strike a balance between the legitimate rights of owners of germplasm and technology owners (Rosendal 2006: 432). To put it in a different way, benefit sharing could be seen as a counter-balance strategy in favour of farmers' and local communities who do not have any kind of property rights over their resources and knowledge against owners of worked plant genetic resources whose property rights are comparatively well protected under the IPR regime. This idea is expressly manifested under the CBD by accepting the aim of "sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial utilization of genetic resources with the Party providing such resources" (CBD: Preamble and Article 1).

Access and benefit sharing is not a resolved issue in international law. In fact, it is still in an evolving stage. Relevant fact, in this regard, to be noted is the parallel development of the issue of access and benefit sharing in different international forums. Access and benefit sharing has always been a major focus of attention under the CBD. The continued effort in this regard has culminated into the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, 2002 (Bonn Guidelines).[15] As the title indicates, this instrument is voluntary in nature and was adopted to assist member countries to frame legal, policy and administrative framework at the domestic level.

Having adopted the Bonn Guidelines, present effort is targeted towards an international regime on access to genetic resources and benefit sharing. An Ad Hoc Open Ended Working Group on Access and Benefit Sharing has been mandated by the seventh meeting of the Conference of Parties to "elaborate and negotiate an international regime on access to genetic resources and benefit sharing" (CoP Decision VII/19). The preparation of the international regime is expected to be completed before the tenth meeting of the Conference of Parties scheduled to be held in 2010.[16]

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[15] Bonn Guidelines was adopted by the Conference of Parties to the CBD in its sixth meeting held in the Hague on 7-19 April 2002 (CoP Decision VI/24).

[16] Ninth meeting of the Conference of Parties has instructed the Ad-Hoc Working Group to "finalize the international regime and to submit for consideration and adoption by the Conference of the Parties at its tenth meeting". *See* CoP Decision IX/12.

In parallel to this, the issue of access and benefit sharing is being addressed in the forum of World Intellectual Property Organization (WIPO). An Intergovernmental Committed on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore has been constituted and this committee is in the process of preparing guidelines on access and benefit sharing. The WIPO Committee, however, looks the issue from the angle of intellectual property rights, that is, intellectual property aspects of equitable benefit sharing.

Apart from this, there is an attempt from the part of developing countries to bring the issue of access and benefit sharing in the forum of World Trade Organization. From a paper submitted by few developing countries including India to the TRIPS Council in 2002, it appears that developing countries push the agenda to amend the TRIPS agreement to include certain conditions to acquire patent rights in the context of biological resources. These conditions include disclosure of the source or country of origin, evidence of prior informed consent and evidence of fair and equitable benefit sharing.[17]

The link between access and benefit sharing and the IPR regime has a North – South perspective also. This could be seen from the fact that access and benefit sharing laws are increasingly being enacted in developing countries as a reaction to the expanding scope of IPR regimes. At the same time, access and benefit sharing laws are hardly in the agenda of developed countries in the north (Rosendal 2006: 440 - 441). Hence, it could be said that this factor might influence and determine the ongoing efforts at the international level in various forums towards a legal framework for access and benefit sharing. It is also likely that different states would use different forums according to their interests. Presuming this to be true, the ultimate outcome would be overlapping (and sometimes conflicting) legal frameworks at the international level that would further weaken the implementation at the national level.

Hence, it could be seen that the issue of access and benefit sharing is being discussed and negotiated in more than one international forum. This development is

[17] World Trade Organization, TRIPS Council, The Relationship Between the TRIPS Agreement and the Convention on Biological Diversity and the Protection of Traditional Knowledge, Communication from Brazil on behalf of the delegations of Brazil, China, Cuba, the Dominican Republic, Ecuador, India, Pakistan, Thailand, Zambia and Zimbabwe, IP/C/W/356, 2002.

further characterised by the fact that the focus and rationale of these negotiations in different forum are not similar. While in one forum, the issue is discussed in the context of protection and conservation of natural resources, another forum looks at it in the context of international trade.

The parallel development of the legal regime of access and benefit sharing in various international forums would likely to have implications on farmers' rights, given the fact that access and benefit sharing is an important content of and a way to realise farmers' rights. The effective implementation of farmers' rights at the national level inevitably depends upon the results of these ongoing developments. For instance, a strict and strengthened IPR regime is unlikely to accommodate the key norms of prior informed consent and prior disclosure of country of origin. The idea of incorporation of these norms into TRIPS has already been criticised as over-stretching of patentability criterion and would retard scientific development (Dutfield 2005: 921). In this backdrop, the crucial factor is the way in which balance between conflicting interests is going to be drawn.

3.5.2 Farmers' Privileges

Farmers all over the world have been following the practice of using, saving, exchanging and selling seeds for centuries (Brush 1992). In fact, this practice is considered as the backbone of agricultural economy and therefore considered as inseparable from the maintenance of the social and economic structure of agricultural production (Correa 2000: 14). This is of particular significance to developing countries including India where agriculture has not yet been fully commercialised. In a farmers' rights point of view, this practice was a source of seeds adapted to the local conditions and a source of income as well. These practices have found its manifestation in the language of legal rights through the FAO Treaty. The FAO Treaty, in principle, recognises the right of farmers to "save, use, exchange and sell farm-saved seed/propagating material" (FAO Treaty: Article 9.3).

The above mentioned farmers' practices, which have been generally termed as farmers' privileges, are at the core of interaction between farmers' rights and intellectual property rights regime. The IPR regime generally seeks to provide

limited monopoly rights over new plant varieties. The term 'monopoly rights' essentially covers all possible commercial transactions such as selling, offering for sale, export and import (UPOV Convention 1991: Article 14.1). At the outset, it seems that the IPR regime seeks to restrict what has been expressly recognised as farmers' privileges under the FAO Treaty.

Application of intellectual property protection was originally considered as ineffective or irrelevant for the protection of plant varieties. This is mainly because of the fact that until the early twentieth century IPRs were considered as a legal regime that is applicable to commercial production of non-living beings. This principally covered mechanical inventions. Another major highlighted reason is the fact that plants are not 'produced' but they are bred. By and large, this process occurs naturally and the role of human beings in this process was limited to the creation of conditions for plants to reproduce themselves (Borowiak 2004: 514). This perception about plants and plant genetic materials supported and promoted the traditionally following practice of collecting, using and exchanging seeds which in the contemporary legal context termed as farmers' privileges.

However, a change in this scenario was triggered by the development of modern biotechnology. The development in this regard is said to have begun with the discovery of techniques for hybridizing corn in the United States in the early twentieth century (Borowiak 2004: 515). The major feature of the hybrid corn was that its desired characteristics were unlikely to repeat in the subsequent generations. Therefore, farmers were not able to reuse hybrid seeds from their fields without suffering crop yield. This development resulted in opening the possibility of overcoming biological barrier in plant reproduction and therefore the seed-saving practice of farmers. Further, it opened the wide possibility of capitalizing from investments in commercial breeding.

Parallel to the development of science and technology, there was mounting arguments in favour of legal protection to commercial breeders. It was mainly based on the notions of justice and development. The major argument raised in this regard was the injustice faced by commercial breeders. It was argued that the legal system provides a framework in which an inventor of a devise can gain reward for his invention. At the same time, the effort and investment in a process (plant breeding)

that serve significant benefit to the society go unrewarded (Borowiak 2004: 516). This argument has two consequences. First, it tends to rationalise the legal protection for commercial breeders through IPRs. Second, it could be seen as aimed at restricting with the tool of law the seed-saving practice of farmers which cannot be restricted otherwise.

The development in the field of science and technology made it possible to produce transgenic plants with desired characteristics. Human interference with plants with the help of modern science and technology pulled the idea of intellectual property protection in the field of agriculture. Blakeney observes that "...with the extension of patent protection to recombinant methods for producing transgenic plants and resulting products, patents have begun to assume an increasing significance in plant variety protection" (Blakeney 2002: 13).

The possible implications of the intellectual property regime on farming practices and farmers in developing countries could be evident from couple of instances wherein developing countries have pushed the agenda for amending the TRIPS to include norms related to the protection of farmers' rights and farming practices. For instance, at a meeting of the non-aligned and developing countries held at New Delhi on 29-31 January 1999, a number of suggestions were made to amend patent provision under the TRIPS. These suggestions essentially included crucial norms related to farmers' rights such as disclosure of places of origin, prior consent and benefit sharing. In fact, the meeting recommended the inclusion of a comprehensive code of provisions protecting farmers' rights in national patent laws. In another instance, Kenya, in a communication to the TRIPS Council, proposed to include norms of protection of traditional knowledge, protection of farmers' privileges and food sovereignty as part of the provision dealing with plant variety protection, that is, Article 27.3.b (Blakeney 2002: 16).

An instance where direct impact of intellectual property regime on farmers' privileges could be seen in the UPOV 1991. Under the UPOV 1991, government may, as an optional rule, permit farmers to use protected varieties for propagating purposes on their own landholdings. It is important to note that this provision does not permit farmers to exchange or sell seeds. This is also an example where

intellectual property regime shows a gradual strengthening of rules. Under UPOV 1978, these farmers' privileges were allowed at least to some extent.

The major legal consequence of the development and eventual strengthening of the UPOV on farmers' rights is the extended protection to commercial breeders and consequent legal manifestation of farmers' privileges as 'exception' to breeders' rights. For instance, the UPOV, 1991 mandates that farmers should obtain authorisation from the breeder to indulge in activities which are recognised as exclusive rights of the breeder such as production, reproduction and selling. The apparent legal consequence of this provision is the making of traditionally practicing farmers' privileges an 'unauthorised' act. Borowiak opines, in this regard, that "...the representation of traditional farming practices as 'unauthorized' suggests implementing a mode of governmentality that would oversee, regulate, and micromanage farmers' activities to prevent such abuses" (Borowiak 2004: 519).

The standard of intellectual property protection is further being strengthened through bilateral trade agreements frequently termed as TRIPS plus agreements. These TRIPS plus agreements envisage stronger and wider protection (Rosendal 2006: 436). In a farmers' rights point of view, this development would have implications on farmers' privileges, particularly at the implementation level. Because, having framed in a vague and soft language, farmers' rights regime would likely to be subjected to intellectual property laws at the level of implementation. Hence, a strong intellectual property protection at the national level means likelihood of lesser recognition and protection to farmers' privileges. In fact, it is observed that, the ongoing developments in the IPR regime tend to strengthen the intellectual property protection to biotechnology inventions (Rosendal 2006: 436).[18]

[18] It is to be noted, in this context, that some scholars argue that a well defined intellectual property rights regime would be in effect beneficial for all, particularly for developing countries. Boyd et al (2003) argues that the reluctance of the developing countries to implement stronger IPR protection to agricultural biotechnology innovations will ultimately deny the developing countries an opportunity to address some of their crucial issues such as economic development, environmental protection and public health. It is argued that the agricultural biotechnology offers a promising potential for developing countries given the ability of agricultural biotechnology to contribute towards increased food production, enhancement of nutritional value of food and thereby the overall social and economic development.

Implications of this legal framework need to be looked in the context of the extent of the farmers' privileges. A United Nations Development Programme (UNDP) study shows that 1.4 billion rural people rely on farm-saved seeds as their primary source of seed for next year's harvest (UNDP 1999: 68). In the indian context, it has been observed that farm saved seeds and inter-farmer sales together account for more than eighty per cent of the total seed requirements (Ramanna 2006; Cullet 1999).[19] Therefore, dependence on seed market in every year most likely would have adverse implications on agricultural economy and farmers' livelihood.

Another impact of the increasing intellectual property protection is the potential threat to agricultural diversity. As the number of varieties protected by stricter plant breeder rights increases the number of traditional varieties are likely to decline or perish. The laboratory produced varieties might crowd out local varieties and ultimately leads to genetic erosion. This reveals a scenario that while one regime (the FAO Treaty) aspires to promote farmers' practices and privileges, other regime tends to curtail it in effect. In the specific context of farmers' privileges vis-à-vis IPRs, the *Schmeiser case* has specifically shown that a strong IPR regime is likely to restrict farmers' privileges. The striking of balance in this context depends upon the nature of each regime at the national level and the factor that how this problem has been addressed under the later regime.[20]

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[19] A study conducted by the Gene Campaign in the state of Bihar establishes that nearly 70 -80 per cent of the farmers rely on traditional seeds from their own source. The majority of the remaining requirements are satisfied from farmer to farmer exchange and sale. It has been observed that only below ten per cent of the seed requirements are satisfied through formal markets (Sahai et al 2005).

[20] There are also contradictory opinions among scholars regarding the conflicting nature of different regimes. For instance, Gerstetter et al (2007) argues that theoretically there is no conflict between the FAO Treaty on the one hand and the UPOV and the TRIPS on the other hand. By taking the provision under the FAO Treaty on the protection of farmers' privileges, it is argued that the FAO Treaty does not grant any new rights to farmers. Instead, it simply seems to protect any existing rights under the national law which protects farmers' privileges. Since the UPOV and the TRIPS precede the FAO Treaty, the provision related to the protection of farmers' privileges under the FAO Treaty will only has a residual effect. It means, the scope of the provision under the FAO Treaty will be interpreted in such a way to avoid conflict with the UPOV and TRIPS. While the arguments raised may be technically correct, the impacts of the UPOV and TRIPS regime on farmers' rights at a normative level cannot be neglected. Moreover, the impacts of overlapping regimes at the on the implementation at the domestic level have not been addressed in this analysis. In fact, the complexity at the domestic level is highly likely and it would be very difficult to arrive at a balancing regime at the domestic level.

3.5.3 Protection of Traditional Knowledge

Protection of traditional knowledge is an important content of farmers' rights in international law. The FAO Treaty envisages protection of traditional knowledge as one of the three major illustrated ways through which farmers' rights are expected to be protected and promoted (FAO Treaty: Article 9.2.a). However, the FAO Treaty does not provide any guidance as to the nature, scope and meaning of the term 'traditional knowledge'. Neither the treaty provides any guidance as to the way in which traditional knowledge is to be protected. This gap leaves the question to be answered with the help of other relevant international documents and scholarly literature. Indeed, there are other regimes, particularly the CBD and the WIPO, which address these issues, though in different context and with different rationale.

The term 'traditional knowledge' denotes the knowledge which has evolved and is evolving in a continuous basis. It includes the knowledge of indigenous people or tribal people but it is not limited to these specific categories. In the context of farmers' rights, it denotes the knowledge of farmers or farming communities concerning wild and domesticated agricultural biodiversity (Cullet 2005: 288). To be more precise, the concept of traditional knowledge, most importantly, includes the knowledge regarding particular plant variety having desired characteristics and the process through which such variety has been developed.

The idea of traditional knowledge could be seen as a resistance or a counter-strategy against the increasing hegemonical influence of the western notion of science and technology (Drahos and Braithwaite 2003). This should be seen in the context of the development of international legal framework aimed to provide monopoly rights over knowledge systems produced with the help of modern science and technology which is largely dominated by the western notion. Practices, contributions and rights of indigenous or tribal people are, generally, considered as not in tune with the western notion of knowledge system. Therefore, the development of legal framework for the protection of knowledge and information at the international level, to a great extent, neglected the traditional knowledge system or considered it as not containing any significant value to be protected through legal framework (Cullet 2005: 289).

However, protection of traditional knowledge entered into international policy debates, at least, since the early 1990s. The demand in this regard was raised by developing countries and they used all available international forums to push it further. There are two obvious reasons why developing countries raised this issue at the international level. First, developing countries realised the potential commercial value of their traditional knowledge system as a significant input for the development of the so called modern scientific knowledge and technology. Second, the overwhelming part of traditional knowledge system has been developed and existing in developing countries.

The development, in this regard, at the international level could be traced back to the United Nations Conference on Environment and Development, 1992 (UNCED). Two documents adopted in this conference expressly highlight the need for the protection of traditional knowledge. The Declaration adopted at UNCED states that "indigenous people and their communities...have a vital role in environmental management and development because of their knowledge and traditional practices" (Rio Declaration 1992: Principle 22). Agenda 21 also expressly recognise the need to protect traditional knowledge (Agenda 21 1992: Chapter 26, Paragraph 26.3.a).

The prominent legally binding framework related to traditional knowledge is the CBD. The CBD, in principle, casts obligation upon the member countries to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity" (CBD: Article 8.j). The issue has been further progressed under the CBD regime by constituting a Working Group to develop *sui generis* protection of traditional knowledge. The mandate of the Working Group is to consider non-intellectual property based *sui generis* forms of protection of traditional knowledge, innovations and practices relevant for the conservation and sustainable use of biodiversity.[21] Hence, it could be seen that traditional knowledge is relatively a novel concept in international law and the

[21] CoP Decision VII/16, Article 8(j) and Related Provisions: Section H: Development of Elements of sui generis systems for the protection of traditional knowledge, innovations and practices, in Report of the Seventh Meeting of the Conference of Parties to the Convention on Biological Diversity, UN Doc. UNEP/CBD/COP/7/21 (2004).

development of a *sui generis* system for the protection of traditional knowledge is still in an ongoing process.

The ongoing development with regard to the protection of traditional knowledge is not limited to the CBD regime. Development in this regard is also progressing in various international forums, most importantly in the WIPO. As opposed to the established objective of the ongoing efforts in the CBD regime to promote and develop a non-intellectual property based protection regime, the WIPO efforts are directed towards the scope of extending intellectual property regime to protect traditional knowledge. While both these efforts differ in the nature of rights sought to be granted to the holders of traditional knowledge, it appears to share at least some of basic norms through which these rights are expected to be protected. Among these, important norms are the norms of prior informed consent and mutually agreed terms in accessing and using traditional knowledge.

Since the development of the legal framework for the protection of traditional knowledge is in a premature stage, there is huge debate among scholars as to the nature of protection to be granted to traditional knowledge. Some scholars argue that a carefully drafted intellectual property regime is a fit case to protect traditional knowledge and it would enable realisation of farmers' rights. Cottier and Panizzon argue that an intellectual property protection in traditional knowledge constitutes another proprietary instrument for empowering farmers and agricultural communities (Cottier and Panizzon 2004: 386). It is further argued that an intellectual property based traditional knowledge regime would in effect help to promote conservation and maintenance of the traditional knowledge system and at the same time prevent misappropriation.[22] Another highlighted benefit is the possibility of proper, effective and continuous reward for right holders (Cottier and Panizzon 2004).

Another set of arguments highlights that traditional knowledge in particular and farmers' rights in general are not suitable to be protected through intellectual property system. This argument is mainly based on the reason that traditional

[22] Liu (2007) points out that there are two major objectives sought to be achieved through a legal framework for the protection of traditional knowledge: first, the conservation of traditional knowledge and, Second prevention of unauthorised exploitation.

knowledge system is significantly different from the knowledge system protected by intellectual property rights. Major difference lies in the fact that traditional knowledge, unlike the knowledge produced according to modern science and technology, is collective in nature and it is very difficult to identify precisely the beneficiaries (Blakeney 2002; Correa 2000; Cullet 1999; Odek 1994).

Another argument in this regard is based on the cultural aspects of traditional knowledge system. While the intellectual property system generally focuses on the commercial aspects of the knowledge systems, it may not be always work in the case of traditional knowledge system. It cannot be presumed that commercial benefits are the key interests the right holders of traditional knowledge including traditional farmers seek to achieve. There may be several other concerns or values attached to the traditional knowledge system including cultural value.

Hence, it is clear that more than one forum at the international level is playing key roles in the development of a legal framework for the protection of traditional knowledge. This parallel development at different forums having different focus and objectives would likely to influence and implicate farmers' rights. This is particularly relevant because the FAO Treaty does not go beyond recognising the protection of traditional knowledge as a way to realise farmers' rights. Therefore, the realisation of farmers' rights at the local level would be determined by these developments at the international level. Moreover, the possibility of an obscure normative framework cannot be overruled given the different directions in which the present efforts are moving. This may further weaken the implementation of farmers' rights.

3.6 Summation

Having incorporated the term farmers' rights expressly, the FAO Treaty can be considered as a significant achievement. However, the way in which farmers' rights have been articulated under the treaty does not promise much for farmers in the field. Even though the FAO Treaty uses the term "farmers' rights", it does not guarantee or provide any concrete enforceable rights. In effect, the FAO Treaty does not make much difference from the situation prior to the adoption of the treaty. This makes the critique to state that "After all, you do not need an international

treaty to state that countries have the right to prepare their own legislation" (Bjørnstad 2004: 46).

The scope and application of the FAO Treaty in relation to farmers' rights are limited. There are several incomplete or left-out areas under the FAO Treaty such as benefit sharing and the protection of traditional knowledge. These left-out areas inevitably link farmers' rights with other multilateral regimes, particularly the CBD, UPOV and WIPO.

Three key aspects of farmers' rights – access and benefit sharing, farmers' privileges and protection of traditional knowledge – links farmers' rights with other multilateral treaty regimes and institutions. These key aspects of farmers' rights are still in an evolving stage under these regimes. It is also a fact that the ongoing efforts under these regimes are not moving in a completely complementary manner.

For instance, access and benefit sharing and protection of traditional knowledge are some of the important issues of ongoing developments under different regimes such as the CBD and WIPO. While the efforts under the CBD regime seek to develop a *sui generis* non-intellectual property based legal framework, the efforts under the auspices of the WIPO seems to be moving towards an intellectual property rights based framework.

It could be concluded that farmers' rights as an international legal norm is in an evolving stage. The FAO Treaty provides the basis and definition of farmers' rights. At the same time some of the key aspects of farmers' rights such as benefit sharing and traditional knowledge are in an ongoing stage under different regimes. Hence, the concretisation of farmers' rights at the international level will depend upon the outcome of the ongoing efforts and their complementarities. These developments at the international level will have significant implications upon the farmers' rights regime at the domestic level.

CHAPTER 4

NOTION OF FARMERS' RIGHTS: CONCERNS OF DEVELOPING COUNTRIES

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4.1 Introduction

The idea of farmers' rights has been pushed at the international level mainly by the developing countries. Developing countries have argued in favour of a strong articulation of farmers' rights during the FAO Treaty negotiation. Major objectives of developing countries in this regard were fair and equitable benefit sharing, protection of traditional farming practices such as exchange and sale of farm produced seeds and legal recognition of collective rights of innovations and knowledge systems of traditional farmers.

The adopted text of the FAO Treaty shows that the developing countries have not succeeded completely in their efforts. Major concerns of developing countries presented during the FAO Treaty negotiation still remains either in a rudimentary or in an evolving stage. In this background, this chapter aims to examine some of the important concerns of developing countries related to farmers' rights such as food security, right to food and classic property rights. This chapter will also examine the model law drafted by the Organisation of African Union in this regard. This is presented as a *sui generis* model legal framework in a developing country perspective.

4.2 Food Security and Right to Food: An Overview

Food insecurity has been recognised as a major challenge that international community is facing. In fact international community has expressed its concern in Rome Declaration on World Food Security (hereafter 'Rome Declaration') by saying food insecurity as 'intolerable' and 'unacceptable' (Rome Declaration 1996). It is a serious concern particularly for developing countries where access to food by specific individuals remains a major concern (Cullet 2004). A report by Food and

Agricultural Organization estimates that approximately 840 million people were undernourished in 1998-2000 and most of them in the developing world (FAO 2000: 50).

This scenario seems to have brought the issue of food security to the negotiation table at the international level. This effort has resulted in the development of the concept of food security particularly through several policy level documents. The concept of food security is said to have begun developing in the 1970s. Since then the idea of food security received significant attention from the part of policy makers and researchers. This increased attention could be seen from the fact that there are over two hundred documented definitions of food security with each definition emphasising variegated factors and indices (Oguamanam 2007: 230).

At the time of the 1974 World Food Conference, the term food security was defined as the 'availability at all times of adequate food supplies of basic food stuffs...to sustain a steady expansion of food consumption...and to offset fluctuations in production and prices' (FAO 1974). The focus of the debate during this period was on strengthening food production and to increase availability and stability of world food supplies of basic food stuffs particularly cereals to meet increased demands (Mechlem 2004: 633).

Starting from the 1974 World Food Conference the concept of food security has been developing through a number of policy documents and scholarly literature (Mechlem 2004: 633-637). At present the most widely used and accepted definition of food security is the one adopted at the World Food Summit in 1996. The World Food Summit provides that 'food security, at the individual, household, national, regional and global level is achieved when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life' (World Food Summit Plan of Action 1996: Para. 1). This definition appears to cover all key normative contents such as availability, accessibility, adequacy and quality (Chidi 2007: 231). The concept of food security as adopted in international documents sets the objective for the individual states to take all measures including policy and administrative measures to achieve food security (World Food Summit Plan of Action 1996).

The concept of food security and right to food can be considered as inevitably linked to each other. While the concept of food security, by and large, remains as a policy objective, right to food constitutes a right based approach towards food security. In fact, policy documents at the international level related to food security expressly establishes this link. For instance, Plan of Action adopted at the World Food Summit, 1996 sets an objective to 'clarify the content of the right to adequate food ...as a means of achieving food security for all'. Further, in October 2002, the Food and Agricultural Organization Council established an Inter-Governmental Working Group with the mandate 'to develop a set of voluntary guidelines to support member nations' effort to achieve the progressive realisation of the *right to food in the context of national food security*' (emphasis added) (FAO 2002).

The FAO Council adopted the Voluntary Guidelines in 2004. The salient features of the Voluntary Guidelines in relation to farmers' rights could be stated as:

- The need for specific national policies and legal instruments to prevent the erosion of and to ensure the sustainable use of genetic resources for food and agriculture;
- Asserts the need for protection of traditional knowledge;
- Equitable participation in sharing benefits arising from the use of plant genetic resources; and
- Participation of indigenous communities and farmers in making decisions on matters related to the conservation and sustainable use of genetic resources for food and agriculture (FAO 2004).

Indeed right to food is an established right under international human rights law. There are a number of binding and non-binding instruments under international human rights law recognising right to food expressly and impliedly. International human rights law treats right to food as part of right to adequate standard of living. Universal Declaration of Human Rights recognises that 'everyone has the right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing..." (UDHR: Article 25.1). International Covenant on Economic, Social and Cultural Rights (ICESCR) could be considered as the instrument that deals most comprehensively with right food. ICESCR

recognises 'the right of everyone to an adequate standard of living for himself and his family including adequate food" (ICESCR: Article 11.1).

The legal concept of right to food has been further elaborated by the Committee on Economic, Social and Cultural Rights (UNCESCR) through the adoption of General Comment No. 12 in 1999. Being the authoritative interpretation of the Covenant, General Comment could be seen as the key documents illustrating the nature, scope and contents of right to food in international law.

General Comment No. 12 defines the right to food as 'the right of everyone to have physical and economic access at all times to food in adequate quantity and quality or to means of its procurement' (UNCESCR 1999: Para. 6). This definition, like the definition of food security, appears to cover all important normative contents such as availability, adequacy, accessibility and acceptability. Further, the legal concept of right to food casts specific obligation upon state parties to take measures to fulfill key three obligations, that is, obligation to respect, protect and fulfill.[23]

Hence, it could be seen that the concept of food security and right to food are very much at the core of the debate at the international level. While the concept of food security remains largely as a policy objective, right to food is a concrete legal concept under international human rights law with proper normative contents and legal consequences in the forms of rights and corresponding duties.

4.3 Farmers' Rights, Food Security and Right to Food: Linkages

Farmers and farming communities, being producers of staple foods, across the world are perhaps the most critical actors in the achievement of food security and the realisation of right to food. The United Nations Commission on Human Rights has asserted this link by saying that a sustainable food supply essentially depends upon establishing farmers' rights on a firm footing (Commission on Human Rights 1999). Important aspects of food security and right to food such as physical availability, economic accessibility and quality are inevitably linked to the way in which

[23] For details on obligations of state parties emanating from the human rights law, *see* Committee on Economic, Social and Cultural Rights (1990), General Comment No. 3, The Nature of State Parties Obligation (Article 2, Para.1 of the International Covenant on Economic, Social and Cultural Rights), UN Doc. No. E/1991/23 (1990).

agriculture and agricultural production are perceived, promoted and protected both at the international level and national level. In this regard law and policy framework related to plant genetic resources in general and farmers' rights in particular could be considered as relevant to food security and right to food.

Agricultural biodiversity and the legal regime related to it could be considered as an intersection which illustrates the link between farmers' rights, food security and right to food. It is hardly an indisputable fact that farmers across the world particularly traditional farmers in developing countries have been playing crucial role in maintaining, conserving and improving agricultural biodiversity. Farmers played this role primarily through the process of selection and improvement of good quality seeds for centuries if not millennia. This process, undoubtedly, have enriched the agricultural biodiversity.

Agricultural biodiversity constitutes the basis for all human food consumption, for food security and for sustainable agriculture. Additionally, agricultural biodiversity constitutes directly to the livelihood of large segment of human kind (Kameri-Mbote and Cullet 1999: 261). Role of small and subsistence farmers in this regard is particularly relevant in a developing country context. Small and subsistence farmers in developing countries usually grow staple foods and thereby contribute significantly to the local availability of food. They are usually self reliant in the food production and through which forms important factor in food security at the local level.

Traditional farmers create new varieties that are suitable to local climatic condition through cultivation of land races and seed exchanges with other farmers. Being a model of life and diversity driven and diversity sustaining enterprise, traditional agricultural system contribute significantly to the agricultural biodiversity and food security. This particular feature of traditional agricultural practices makes it perhaps the best approach to food security and right to food (Chidi 2007: 225).

Traditional agricultural practices are compatible with larger environmental concerns. Traditional agricultural practices do not carry the adverse effects of agro-chemicals. Neither have they faced the issue of introducing unwanted or dangerous elements or organisms into the environment. Consequently traditional agricultural practices do

not pose much threat to agricultural biodiversity (Chidi 2007: 228). Hence, it could be said that the legal protection and facilitation of traditional agricultural system and practices could be an important step towards achieving food security, realising right to food and promoting sustainable agriculture.

In contrast to agriculture as a model of life and diversity driven approach modern agricultural biotechnology tends to promote agriculture as an industrial model. To put in a different way, modern agricultural biotechnology and associated legal regime particularly intellectual property rights regime tends to promote a shift from agriculture as a way of life to agriculture as a way of production. Having driven mainly by political economy of agriculture and market consideration, modern agricultural biotechnology has little or no regard to environmental sustainability and protection and conservation of agricultural biodiversity.

The case of genetically engineered crops could be a good example to illustrate the shift promoted by modern agricultural biotechnology and its implications on farmers' rights, food security and right to food. There could be a number of ways in which this intersection and its implications can be described. Straubs by taking the example of genetically engineered crops highlights three major potential ways in which modern agricultural biotechnology affect farmers' rights, food security and right to food in an almost inseparable manner and extent (Straub 2005-06: 197-198).

First, Straubs argues that the cultivation of patented genetically engineered crops is, in many aspects, the antithesis of sustainable and self reliant food production. Intellectual property rights protection to such varieties may make traditional farmers perpetually dependent upon seed companies to purchase seeds. In order to afford this, farmers may shift from growing staple foods for private and local consumption to cultivate cash crops that can be sold for export in order to generate money to buy more seeds. This would affect local food availability and at the same time deny farmers an opportunity to generate income through the sale of seeds from their previous harvest.

Second, the regulation of seed saving, exchanging and selling practices of farmers by intellectual property rights regime may severely affect small and subsistence farmers. Having no significant saving or financial resources to fall back on in the event of bad harvest or any other crisis, subsistence farmers may have to give up

farming. This undoubtedly affects local food supply and livelihood of several people. This scenario could be considered as directly illustrating the link between farmers' rights, intellectual property rights regime, food security and right to life.

Third, as illustrated by the *Schmeiser case* the legal framework developed to protect modern agricultural biotechnology may depict traditional agricultural practices as 'illegal' or 'unauthorised'. It means small and peasant farmers would have to pay license fee or would have to face legal proceeding that is expensive and time consuming too. In both ways, the additional expenses expected to be afforded by small farmers in developing countries would exacerbate the already ruined condition of farmers and consequently national food security.

4.4 Broadening Legal Basis of Farmers' Rights

Having noted the relevant intersection between farmers' rights, food security and right to food, the legal regime of which farmers' rights is a part seems to discard this broad context of food security and right to food. Instead, the existing regime and the ongoing developments show a tendency to emphasis increasingly on limiting the context of farmers' rights to an extent to which farmers contribute to modern agricultural biotechnology. The scope of farmers' rights is increasingly embracing a commercial orientation. This feature is apparent in the ongoing development where emphasis is given to benefit sharing in the form of monetary compensation. At the same time critical aspects of farmers' rights relevant to food security and right to food such as farmers' privileges are constructed in a policy type language and made conditional to the established intellectual property rights.

The international legal regime while acknowledging the importance of access and benefit sharing for traditional farmers, seems to be silent on the question of food security and right to food. This could be seen as a drawback of the existing legal regime. While there can be a number of objectives for which legal frameworks are to be formed, at the bottom line it needs to be in consistent with the idea that the primary aim of the international legal regime should be to meet the basic needs of every individuals which obviously include basic food needs (Kameri-Mbote and Cullet 1999: 276).

Hence, the existing farmers' rights regime needs to be examined in the context of basic need argument. The existing legal regime, by and large, provides concrete property rights to modern agricultural biotechnology innovations in the forms of patents or plant breeder rights and to states in the form of sovereign rights. The immediate rationale behind such a legal formulation could be to ensure exclusive enjoyment of potential commercial benefits. At the same time the position of farmers and their role in the achievement of food security and the realisation of right to food seem to be sidelined or neglected in this legal formulation.

The need to project food security and right to food as a rationale for farmers' rights could be viewed in different ways. One important way is to expose the implications of the existing regime on food security and right to food. Straub observes that "the human right most affected by the new development in agrotechnology and intellectual property legislation is...right to adequate food" (Straub 2005-06: 193). The apparent implications on right to food are further likely to be exacerbated by the lack of regard for food security and right to food under the existing regime. In this regard it has been suggested that instead of extending forms of property rights such as plant breeders' rights which seek to restrict the flows of knowledge and agricultural biodiversity resources, the international legal framework should rather foster free exchange and unrestricted access so as to solve the food deficit problem at local and international level (Kameri-Mbote and Cullet 1999: 279).

While food security and right to food context is relevant in rationalising farmers' rights regime, it can also be helpful at the national level in striking balance between conflicting and overlapping regimes. In this regard, right to food jurisprudence is more relevant in the contemporary context because it is a well established right under the international human rights law and almost all countries including India are in principle obliged to give effect to the right to food.

Right to food is one of the basic human rights. It casts obligation on state parties to take all possible measures to give effect to this human right. Whenever a question of priority arises, governments are supposed to uphold the primacy of human rights

obligations over economic policies and agreements.[24] This inalienable and indivisible nature of human rights can be a possible tool at the domestic level to solve the issue of potential inconsistencies between farmers' rights regime and other related regime particularly intellectual property laws. Hence, right to food can be a possible legal basis for protecting traditional farming system and practices for developing countries in the contemporary legal context of plant genetic resources overshadowed by the intellectual property laws.

4.5 Farmers' Property Rights

4.5.1 Farmer's Rights v. Property Rights

The development of legal framework related to farmers' rights in the last couple of decades has increasingly focused on defining or redefining property rights over plant genetic resources (Roa-Rodriguez *et al* 2008). This development has resulted in defining different kinds of property rights by different legal regimes such as private property rights for commercial breeders and sovereign rights for states.

The intellectual property rights regime mainly represented by the UPOV and TRIPs sets out an individual private property rights regime for worked plant genetic resources. This regime essentially leaves out the traditional agricultural resources and knowledge. This is primarily because traditional agricultural resources and knowledge do not satisfy the essential criterion such as originality and distinctiveness that need to be fulfilled to get intellectual property right protection. It has also been argued that the intellectual property rights regime has been developed to protect a specific class of knowledge and resource and therefore it cannot be used or expanded to give protection to an entirely different category of resources and knowledge (Blakeney 2002; Correa 2000).

At the same time, raw plant genetic resources which used to be considered as a global common became subjected to another kind of property rights. A new property

[24] UN Sub-Commission on the Promotion and Protection of Human Rights in one of its resolution has reminded "all Governments of the primacy of human rights obligations over economic policies and agreements". *See* UN Sub-Commission on the Promotion and Protection of Human Rights (2000), Intellectual Property Rights and Human Rights, Resolution No. 2000/7, URL: http://www.unhchr.ch/Huridocda/Huridoca.nsf/0/c462b62cf8a07b13c12569700046704e?Opendocument.

domain was established by the CBD by subjecting plant genetic resources to state sovereignty. The major legal consequence of this sovereign property domain was the introduction of restriction to access to raw genetic resources through contractual agreements primarily between the providing government and the receiver of plant genetic resources.

It could be said that developments at the international level in the last couple of decades have assigned property rights to two dominant players in this regard. Firstly, to commercial breeders largely represented through the agency of western developed countries and secondly, to the sovereign states represented by majority of developing countries. The development of property rights in this regard could be considered as following the Demsetzian hypothesis which says that the evolution of legally established property rights is in response to changes in the benefits associated with property rights and costs of enforcing the rights (Sedjo 1992: 207). The increased ability to manipulate genes has increased the potential benefits from property rights on genetic resources and the ability to precisely define and identify biological organisms has dramatically decreased the cost of enforcement of property rights. However, the developments in this regard have been largely in the direction of protecting worked plant genetic resources and rights of farmers on their resources and knowledge have received little or no recognition.

4.5.2 Farmers' Classic Property Rights

A major concern missing in the contemporary property rights matrix is the property rights of traditional farmers particularly the classic property rights.[25] Both the intellectual property rights domain and sovereign property rights domain have undermined or sidelined the classic property rights of traditional farmers. For instance, the sovereign property rights domain provides proprietary right of raw genetic resources on the government and at the same time intellectual property rights domain restricted or prohibited the traditionally exercisable property rights such as property rights over harvest and seeds.

[25] The term 'classic property' denotes private property rights in physical objects. This means, private property rights in things that have real objective existence. Classic property rights in the context of farmers' rights include rights of farmers over their harvest (DeBeer 2005: 5).

In a farmers' rights point of view the right of traditional farmers to save and sell farm saved seeds could be considered as the best illustration of classic property rights. The seed selling rights of farmers are also relevant because this right is the one that seem to have been affected most by the development of intellectual property rights in agriculture.

Farmers' seed saving and selling rights are as old as private property itself and they are part of the standard bundle of rights that accompanies "full-blooded ownership" of classic property. Therefore, it should be considered as all encompassing as any of the most powerful classic property rights (DeBeer 2005: 30). However, the development of intellectual property rights regime seems to have forgotten these longstanding and well settled proprietary rights in physical objects. The intellectual property regime explicitly or implicitly tends to subordinate classic property rights (DeBeer 2005: 5).

Classic property rights in this regard are especially important for farmers in developing countries. They are considered as an integral component of sustenance farming and therefore crucial for food security also. In this background, DeBeer argues that "...farmers' seed saving rights should be seen for what they truly are – classic property rights – rather than public interest exceptions carved out from *a priori* dominant IP rights or incidental means to social ends" (DeBeer 2005: 6).

While it is not sure about the possibility of lifting a property right emanating from common law tradition against a statutory right, the undermining of a discussion and debate in this regard is not completely justifiable. At the same time, it needs to be asked that what is the legal rationale behind the situation where the classic property rights of farmers are being increasingly subjected to subsequently developed property rights? Further, it needs to be questioned that while plant genetic resources are fundamentally both tangible and intangible resources, what is the logic behind the prioritisation of intangible aspects of the resource?[26] Further, the discussion on farmers' classic property rights should be seen in the context of its relevance to small and sustenance farmers, agricultural biodiversity and food security.

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[26] For an explanation as to the tangible and intangible aspects of plant genetic resources, *see* Roa-Rodriguez *et al* 2008: 178-179.

4.5.3 *Schmeiser* case

The expansive nature of intellectual property rights in agriculture and its implications on farmers' classic property rights can be explained with the help of *Schmeiser case.* Background to this case is the development of a particular variety of canola by Monsanto, which is resistant to a herbicide that kills plants. Schmeiser was a farmer who has been cultivating canola for many years. While a number of his neighbouring farmers decided to use Monsanto's genetically modified variety of canola, Schmeiser chose not to use the same. However, he was found to be in possession of Monsanto's patent protected variety of canola though he never purchased it. Resultantly Monsanto filed litigation against Schmeiser for the infringement of patent rights.

The Canadian Court of Appeal in the *Schmeiser case* said that "there is no authority for the proposition that ownership of a plant must necessarily supersede the rights of the holder of a plant for a gene found in the plant. On the contrary, the jurisprudence presents a number of examples in which the rights of ownership of property are compromised to the extent required to protect the patent holder's statutory monopoly".[27] The Supreme Court of Canada also upheld this view in essence by saying that "ownership is no defense to a breach of the Patent Act".[28]

The essence of this decision is that the intellectual property rights trumps the classic property rights. Hence, at the worst scenario, if a farmer found a patented gene infiltrated in his crop his all seed saving and selling rights stand extinguished. This implication is, to some extent, relevant in indian context also. Even though the PVP Act protects farmers' privileges, farmers could be put behind the bars for selling branded seeds. This means, farmers' classic property rights are generally available to the extent to which it respects the intellectual property rights of commercial breeders, that is, farmers' classic property rights has become residual in nature.

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[27] Canadian Court of Appeal decision as quoted in DeBeer 2005: 12.

[28] Monsanto Canada Inc. *v.* Schmeiser, [2004] 1 S.C.R. 902, 2004 SCC 34, para. 96, [Online: web] Accessed 8 May 2009, URL: http://csc.lexum.umontreal.ca/en/2004/2004scc34/2004scc34.pdf.

4.6 A Sui- Generis Model: African Experience

The Organisation of African Unity (OAU) adopted the African Model Legislation for the Protection of Rights of Local Communities, Farmers and Breeders for the Regulation of Access to Biological Resources in 2000 (hereafter the 'African Model Law'). The African Model Law was the result of the effort of the Organisation of African Unity to provide guidance to make legal framework adapted to the needs of the African region. This could be considered as an effort to address post TRIPS requirements in a way that is suitable to the region. Even though the African Model Law has not been followed widely in the region, it has been hailed as an appropriate legal framework for most African countries (Kongolo 2001; Cullet 2005: 264-267). Presuming that all developing countries share, at least to some extent, needs and concerns related to legal framework of plant genetic resources and farmers' rights, the norms and principles related to farmers' rights enshrined in the African Model Law can be considered as relevant for developing countries in general.

4.6.1 Farmers' Rights under the African Model Law

The African Model Law pursues a number of interrelated goals. It generally seeks to ensure the 'conservation, evaluation and sustainable use of biological resources including agricultural resources, knowledge and technology..." (African Model Law: Part I, Objectives). In order to achieve this, the African Model Law recognises and addresses a number of issues. These issues include community rights, farmers' rights, breeders' rights and access to biological resources.

The African Model Law treats farmers' past, present and future contributions in the conservation, development and sustainable use of plant and animal genetic resources as the basis of farmers' rights (African Model Law: Article 24). Farmers' varieties and breeds are recognised and protected under the African Model Law. Protection of farmers' varieties and breeds are to be provided as per the customary practices and laws of the concerned farming communities (African Model Law: Article 25). The African Model Law provides for the protection of varieties with specific attribute identified by a community through a variety certificate (African Model Law: Article

25). The criteria of distinction, uniformity and stability are not applicable to invoke protection through a variety certificate.

The African Model Law defines farmers' rights in an illustrated manner by providing key contents of farmers' rights. Key contents of farmers' rights include the protection of knowledge relevant to plant and animal genetic resources, the right to an equitable share of benefits arising from the use of plant and animal genetic resources, the right to participate in making decisions on matters related to the conservation and sustainable use of plant and animal genetic resources, the right to save, use, exchange and sell farm saved seed or propagating material and the right to use a commercial breeders' variety to develop other varieties (African Model Law: Article 26).

Apart from these provisions explicitly addressing farmers' rights there are other norms provided in the African Model Law that could be considered as relevant to farmers' rights. Most importantly, the African Model Law envisages the norm of prior informed consent in the regulation of access to biological resources. Prior informed consent and written consent from the government and concerned local community are provided as mandatory requirements for accessing biological resources (African Model Law: Article 3 and 5). Otherwise access would be deemed as invalid.

Another important provision in this regard is the Model Law's approach towards farmers' privileges or traditional farming practices. Right to access, use, exchange or share biological resources are recognised as inalienable rights of local communities (African Model Law: Article 21). Further, farmers' right to save, exchange and use part of the seed from the first crop have been mentioned as an exemption to breeders' rights (African Model Law: Article 31.2).

4.6.2 Salient Features of African Model Law: A Developing Country Perspective

The norms, preferences and concerns reflected in the African Model Law could be considered as particularly relevant for developing countries. Having enriched with immense biological diversity and biological resources with both commercial and

non-commercial value in developing countries, the African Model Law seems to represent, to a great extent, the interests and concerns of developing countries. Therefore, the norms, preferences and approaches adopted in the African Model Law could generally be considered as fit to be followed by developing countries. In this regard, the major features and approaches of the African Model Law are worth to be highlighted because this could constitute at least a broad basis of a *sui generis* protection framework for plant genetic resources and farmers' rights in developing countries.

To begin with the specific provisions on farmers' rights, the African Model Law appears to go beyond the normative framework under the international law and domestic laws in most of the developing countries including India. All key normative contents such as protection of traditional knowledge, equitable benefit sharing, right to participation in decision making and farmers' privileges under the FAO Treaty are provided under the African Model Law. In addition to these norms, there are two other norms in the African Model Law that are to be considered as areas where the African Model Law navigates beyond to reflect the concerns and needs of developing countries.

First, customary rules of practices and laws of local farming communities are treated as worth recognition and protection. This means, the African Model Law seeks to recognise and protect the local customary practices and law; no matter whether such laws have been written or not. Second, the African Model Law talks about a specific 'intellectual protection' to varieties identified by a community through a variety certificate by providing an exemption from the criteria of distinction, uniformity and stability. These provisions could be considered as an express manifestation of legal recognition and protection of contributions of farmers.

Farmers' rights are further enhanced in the way of exemptions and restrictions to breeders' rights which includes the right to propagate, grow and use plants of breeders' variety, the right to sell within a farm or any other place at which plants of that variety are grown and the right to sell plants or propagating material of breeders' variety as food. Farmers' right to save, exchange and use protected

breeders' variety on a non-commercial basis have been reiterated as a restriction on breeders' rights (African Model Law: Article 31). Apart from this farmer(s) specific exemptions, the African Model Law also vests power on the government to put restrictions on breeders' rights on public interests grounds. This 'public interest' concerns or situations include food security or nutritional or health needs, importation of high proportion of plant variety offered for sale, inadequacy of propagating material of a breeders' variety to meet the requirement of the farming community and the need to promote and develop indigenous technologies. In this regard, the African Model Law envisages the tool of compulsory licensing through which the government can convert the exclusive nature of plant breeders' rights into non-exclusive (African Model Law: Article 33).[29]

Another important feature of the African Model Law is the way in which the rights of local communities including farming communities have been recognised, treated and protected. The African Model Law considers the indispensable link between biological resources, knowledge and technologies and the livelihood system of local communities as the basis of their rights over their biological resources and knowledge (African Model Law: Preamble). On this basis, it has been stated that these rights are 'a priori rights which take precedence over rights based on private interests'. The life and livelihood approach has been further elaborated by recognising that the main aim is to 'maintain and improve their diversity as a means of sustaining all life support systems' (African Model Law: Part I, Objectives).

Having based the rights of local communities over their biological resources and knowledge on the notion of life and livelihood supporting systems, the African Model Law recognises the rights of local communities including farming communities as 'inalienable'. For instance, one of the specific objectives of the African Model Law has been provided as the recognition and protection of the 'inalienable rights of local communities including farming communities over their biological resources, knowledge and technologies' (African Model Law: Part I).

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[29] It is to be noted that any restriction on breeders' rights are required to be followed by compensation to the concerned breeder(s). *See* African Model Law: Article 33.2.c.

This inalienable right expressly includes 'inalienable right to access, use, exchange and share their biological resources in sustaining their livelihood systems as regulated by their customary practices and laws' (African Model Law: Article 21.1). The inalienable right to access, use, exchange or share has been further strengthened by not permitting any legal barrier on traditional exchange system of the local communities or any other rights as provided under their customary practices and laws (African Model Law: Article 21.2). This approach particularly the recognition of the rights of communities as inalienable coupled with the prohibition on patenting of life forms and biological processes (African Model Law: Article 9.1), at least to some extent, tends to settle the question of priority of rights of community vis-à-vis the existing intellectual property rights regime.

Benefit sharing is another area where the African Model Law tends to move towards some specificity when compared to the existing regime under international law. This is achieved in two ways. First, a bottom line for the quantum of benefit has been fixed by providing that 'the state shall ensure at least fifty percent of benefits...to the concerned local community or communities' (African Model Law: Article 22.1). Second, the African Model Law emphasises on the norm of 'full participation and approval' of the concerned local communities with regard to benefit sharing arrangements (African Model Law: Article 22.2).

The African Model Law envisages community intellectual rights as a legal concept to protect the rights of local communities and farmers. It is further provided that the community intellectual rights 'shall at all times remain inalienable' and 'shall be further protected under the mechanism established by this legislation' (African Model Law: Article 23.1). The idea of community intellectual rights recognises the collective nature of community involvement in the development of biological resources and knowledge and the informal way through which it has been preserved and improved since time immemorial. The idea of community intellectual rights tends to value traditional agricultural practices and knowledge separately from the western notion of science and technology and related private property rights.

Another distinguishable feature of the African Model Law is the way in which the concern of food security has been treated as part of the legal framework regulating plant genetic resources and farmers' rights. First of all, strengthening of food security has been recognised as an objective of the legal framework related to biological resources (African Model Law: Part I, Para. k). Specifically, food security has been used to put restrictions on breeders' rights. It has been explicitly provided that breeders' rights shall be subjected to restriction with the objective of protecting food security (African Model Law: Article 26.3). This restriction on breeders' rights on food security grounds has been further enhanced by vesting power on the government to subject breeders' rights on restrictions suitable to ensure food security (African Model Law: Article 31.1.b).

The treatment of food security as an objective and as a basis for applying restrictions on breeders' rights over new variety could be considered as indirectly promoting farmers' rights. For instance, an enhanced restriction on breeders' monopoly rights would help local farmers to exercise and enjoy their traditionally following practices without the threat of legal consequences. Given the fact that food insecurity is a crucial issue in most of the developing countries, the African Model Law could be considered as moved further to reflect the interests of developing countries in general.

4.7 Summation

Farmers' rights as provided under multilateral treaty regimes fall significantly short of the aspirations of developing countries. This is evident when we compare farmers' rights under the existing multilateral treaties and the proposal submitted by developing countries during the FAO Treaty negotiation. This situation calls for the need to strengthen farmers' rights in a developing country point of view.

Existing multilateral treaty regimes do not define farmers' rights. Neither has it prescribed any specific ways and means through which farmers' rights shall be implemented. This indeterminacy provides ample opportunity for developing countries to design farmers' rights regime at the domestic level in a way suitable to their needs and concerns.

Developing countries can utilise this flexibility to strengthen farmers' rights regime by incorporating key concerns such as food security, right to food and protection of agricultural biodiversity. The idea of farmers' classic property rights may also help in this process to counterweigh the farmers' rights regime against the expanding intellectual property rights. The African Model Law seems to be helpful in this regard for developing countries as a model legal framework. Most importantly the norms provided under the African Model Law such as collective property rights, variety certificate and the increased scope of restriction of breeders' rights can be used as a reference.

CHAPTER 5

INDIA AND FARMERS' RIGHTS: IMPLEMENTATION ISSUES

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5.1 Introduction

The legal regime related to farmers' rights in India has been evolved in response to the developments that have taken place at various multilateral fora. The concept of farmers' rights has become a part of Indian legal system through statutory frameworks related to plant variety protection and biodiversity. These two statutory frameworks have come into force as India's response to obligations under two international treaties – TRIPS and CBD. In fact, India is one of the few countries having specific legal provisions addressing farmers' rights. Since farmers' rights are primarily the concern of developing countries, an analysis of farmers' rights regime in India has particular relevance.

Farmers' rights regime in India involves mainly two statutory frameworks - the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Biological Diversity Act, 2002. While the former addresses farmers' rights directly, later deals with some of the key aspects of farmers' rights. Hence, the nature and scope of farmers' rights in India are analysed in this chapter.

5.2 Protection of Plant Varieties and Farmers' Rights Act

The legal framework of farmers' rights in India attained significant momentum with the enactment of the Protection of Plant Varieties and Farmers' Rights Act (PVP Act) in 2001. The PVP Act expressly emphasises the need to recognise and protect the rights of farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties (PVP Act: Preamble). The PVP Act provides a separate chapter to elaborate the content and meaning of the legal concept of farmers' rights. Since the PVP Act is the direct source of farmers' rights in India, the nature and scope of

farmers' rights in India is essentially depended upon the articulation of the concept under the PVP Act.

The PVP Act was enacted primarily to comply with India's obligations arising from the Agreement on Trade Related Intellectual Property Rights (TRIPS). The TRIPS casts an obligation upon the state parties to provide plant variety protection either through patents or through a *sui generis* system (TRIPS 1994: Article 27.3.b). India responded to this obligation by enacting the PVP Act. Due to several reasons mentioned earlier such as the strong pressure from the part of civil society organisations, farmers' rights were included as a part of this legal framework formulated originally for the protection of new plant varieties. The PVP Act, by including both farmers' rights and breeders' rights, tends to strike a balance between the interests of the modern commercial breeders and the farmers (Ibid: Introduction).

Interests of and concerns for farmers are recognised in the PVP Act in different ways. Foremost among these are the provisions providing entitlements for farmers. These entitlements are mainly provided under chapter VI of the PVP Act. In addition to that, the PVP Act tends to protect the interests of farmers by envisaging institutional structure for the promotion of welfare of farmers and by providing special exemptions from several procedural requirements.

Specific recognition of entitlements of farmers under the PVP Act could be explained as five major rights. First, the PVP Act provides farmers the right to register a new variety. This right also includes the right to register farmers' variety.[30] This right treats farmers at par with breeders so far as assertion of rights over new varieties is concerned. However, regarding the registration of farmers' variety, the Act provides significant exemptions by not requiring necessary documents which are otherwise to be submitted along with the application for registration of a variety (Ibid: Sections 39 (1)(ii) and 18). Consequently, the application for registration of farmers' varieties does not require documents such as affidavit to the effect that the variety does not contain any gene or gene sequence involving terminator technology, complete passport data of the parental lines from

[30] Farmers' variety is defined in the PVP Act as a variety which - (i) has been traditionally cultivated and evolved by the farmers in their fields; or (ii) is a wild relative or land race of a variety about which the farmers possess the common knowledge. *See* Section 2(l) of the PVP Act.

which the variety has been derived and statement describing briefly the characteristics of novelty, distinctiveness, uniformity and stability (Ibid: Section 18). By virtue of this right, farmers are entitled to exercise and enjoy the benefits sought to be conferred by the registration of a variety, that is, the exclusive right to produce, sell, market, distribute, import or export the variety (Ibid: Section 28.1).

Second entitlement is the right to 'recognition and reward'. A farmer who is engaged in the conservation of genetic resources and its improvement through selection and preservation is entitled to recognition and reward (Ibid: Section 39.1.iii). Right to recognition and reward is subject to the condition that the genetic material so preserved and improved is used as donors of genes in varieties registrable under the PVP Act (Ibid: Section 39.1.iii). The right to recognition and reward as enshrined under the PVP Act recognises the key role played or continues to play by farmers in the field of conservation and improvement of crop genetic resources and envisages reward for such farmers if such conserved and protected genes are utilised for making a new variety registrable under the PVP Act.

The idea of reward for farmers' contributions to the development of a new variety could be seen as a part of a general design of benefit sharing under the PVP Act. The PVP Act envisages the right to benefit sharing to all persons who contributed to the development of a new variety (Ibid: Section 26). The sharing of benefits is designed to be in monetary form. The amount to be paid in the course of benefit sharing is to be determined by considering the extent and nature of the use of genetic material of the claimant in the development of a new variety and the commercial utility and market demand for a new variety (Ibid: Section 26.5).

Third is the right to claim compensation. The PVP Act recognises the right to claim compensation to village or local communities for their contribution to the evolution of a variety registered under the Act (Ibid: Section 41). An important feature of this right is that it is a group right or a community right. Consequently, the principle of *locus standi* is diluted in putting claim for compensation. This means the right holding village or local community need not necessarily lodge claim for compensation. The PVP Act permits any person, group of persons or any governmental or non-governmental organisations to file the claim on behalf of the right holding community (Ibid: Section 41.1). This is particularly relevant in the

case of farmers given the probable incapacity of farmers in various matters related to lodging claim for compensation before the appropriate authority such as satisfying the technical requirements and follow up of registration of new varieties.

The right to claim compensation is available to farmers in another situation also, that is, if they purchase a registered variety. In case a registered variety has been sold to farmers, the breeder of such variety has a duty to disclose the expected performance of the variety under given conditions. If the variety fails to perform as per the disclosure, concerned farmers can claim compensation from the breeder (Ibid: Section 39.2).

Fourth is the protection of traditional practices of farmers. It is already mentioned that farmers across the world have been traditionally following the practice of sharing of knowledge and resources. In the context of genetic resources, it means mainly the practice of using, reusing, saving and exchanging the seeds. With the development of modern agricultural biotechnology and the consequent development of commercial seed industries, legal frameworks have been largely developed or promoted to protect the interests of commercial breeders. This is largely happening by recognising private property rights over commercial seed varieties through legal frameworks protecting patents or plant breeders' rights. The inevitable consequence of these developments is the legal restriction or prohibition of traditional practices of farmers vis-à-vis genetic materials. This situation makes the protection of farmers' practices as one of the major contents of the legal concept of farmers' rights.

The PVP Act tends to recognise and protect farmers' practices. It is provided in the Act that farmers have the right to 'save, use, sow, resow, exchange, share or sell' farm produce including seed of a protected variety in the same manner as they were entitled prior to the PVP Act (Ibid: Section 39.1.iv). However, farmers are not entitled to sell the seed of a variety protected under the Act (Ibid: Section 39.1.iv). This means, out of the bundle of rights provided to protect farmers' practices; the right to sell cannot be invoked in the case of seeds of a variety protected under the Act.

Fifth is the protection of innocent infringement. By virtue of this protection, farmers shall not be sued for infringement of rights granted under the Ibid provided the infringement was innocent, that is, a farmer who alleged to have infringed the rights

was unaware of such rights (Ibid: Section 46). This means an action by a farmer which is otherwise actionable under the PVP Act is not actionable if such infringement was innocent. The legal consequence of such protection is that a right holder under the PVP Act cannot claim damages or share of profits from farmers for infringement of his rights.

Besides the above mentioned entitlements, there are mainly two other ways through which farmers' interests are recognised and protected under the PVP Act. First, special considerations and privileges are provided to farmers by way of exemptions such as exemption from documents to be submitted along with the application for registration of a variety (Ibid: Section 18.1) and exemption from fees to be paid in any proceedings before the authority, registrar or the tribunal or the High Court under the Act (Ibid: Section 44). The special consideration could also be seen in the dilution of the principle of *locus standi* by permitting any person or organisation to file claim for compensation on behalf of farmers or local community (Ibid: Section 41.1).

The second way of ensuring the protection of interests of farmers is through institutional arrangements provided under the PVP Act – Protection of Plant Varieties and Farmers' Rights Authority (hereafter 'the Authority') and the Gene Fund (Ibid: Section 3 and 45). It is explicitly mentioned in the Act that the general function of the Authority includes the protection of the rights of farmers (Ibid: Section 8.1) and to ensure that the seeds of varieties registered under the Act are available at reasonable price and reasonable quantity (Ibid: Section 8.e and 47). Gene fund is a financial mechanism envisaged under the Act. This is the mechanism from which output of major entitlements such as compensation and benefit sharing are to be flowed. Hence, it could be said that the Authority and the Gene Fund play crucial role in the realisation of farmers' rights as envisaged under the PVP Act.

5.3 Biological Diversity Act

The Biological Diversity Act, 2002 (hereafter 'Biodiversity Act') is another important statutory framework significant to farmers' rights in India. The Biodiversity Act was enacted with the purpose of complying with the CBD. The Biodiversity Act does not address farmers' rights explicitly. Nevertheless, two

important aspects of farmers' rights are dealt with under the Biodiversity Act. They are access to biological resources and fair and equitable sharing of benefits arising out of the use of biological resources.

While the PVP Act is silent on the issue of access, this is one of the important objectives of the Biodiversity Act (Ibid: Preamble). Therefore, the Biodiversity Act is the major statutory framework in India applicable to the issue of access to plant genetic resources. Access to biological resources or knowledge (this includes plant genetic resources and knowledge) is regulated under the Biodiversity Act through a license mechanism. This means a prior approval from the National Biodiversity Authority is to be obtained to access biological resources and knowledge (Ibid: Section 3.1). The requirement of prior approval is also applicable to the case of transfer of the results of any research relating to biological resources obtained from India (Ibid: Section 4).

The application of the prior approval system is limited to foreign citizens, foreign corporations and Indian citizens who are non-resident (Ibid: Section 3.2). Indian citizens and Indian companies are expressly excluded from this provision. The Biodiversity Act provides a lesser degree of regulation to Indian citizens and corporations registered in India by requiring prior intimation from the State Biodiversity Board. There is a significant difference between 'prior approval' and 'prior intimation'. Foreign citizens and companies have to wait until they get permission from the National Biodiversity Authority. At the same time their Indian counterparts have to just intimate and do not have to wait for the permission.

This differential treatment would likely to have implications on farmers' rights. Regulation at the point of access could be considered as an effective measure through which the scope and extent of benefit sharing can be determined. Moreover, this is the stage where key norms of prior informed consent and mutually agreed norms can be effectuated fruitfully. This is apparent in the Biodiversity Act where it gives power to the National Biodiversity Authority to put terms and conditions in the prior approval including terms and conditions regarding benefit sharing (Ibid: Section 19.3). While this differential treatment can be justified on the ground that the most serious breaches will occur when biological resources or traditional knowledge are transferred without regulation to foreign countries, this does not seem

to make much sense so far as the rights of the traditional farmers and local communities are concerned (Sagar 2005: 387).

Equitable sharing of benefit is another important area where the Biodiversity Act is linked to farmers' rights. The Biodiversity Act makes it a mandatory duty of the National Biodiversity Authority to ensure that the terms and conditions subject to which approval is granted secure equitable sharing of benefits. The Biodiversity Act also provides that the benefit sharing arrangement shall be in accordance with mutually agreed terms and conditions between the person applying for approval, local bodies concerned and the benefit claimers (Ibid: Section 21.1).

The Biodiversity Act gives an illustrated list of benefits that could be shared. This includes joint ownership of intellectual property rights, transfer of technology, establishment of research and development units in the area of benefit claimers and monetary compensation (Ibid: Section 21.2). As a general strategy, the Biodiversity Act provides that the compensation amount is to be deposited in the National Biodiversity Fund. It is further envisaged that the amount may be paid to claimers directly if it is possible to identify precisely the claimers (Ibid: Section 21.3). However, this is subject to the discretion of the National Biodiversity Authority.

The idea of equitable sharing of benefits is further facilitated under the Biodiversity Act by making it mandatory for any person intending to apply for intellectual property rights, in or outside India, for any inventions based on biological resources obtained from India to get prior approval from the National Biodiversity Authority (Ibid: Section 6.1). One of the purposes of this provision is to ensure equitable benefit sharing by empowering the National Biodiversity Authority to put conditions in this regard on approval (Ibid: Section 6.2). This provision does not distinguish between foreign citizens and corporations and their Indian counterparts. However, this provision is not applicable to the registration of plant varieties under the PVP Act.

5.4 Implementation Issues: An Analysis

The PVP Act has received mixed comments and responses in the context of farmers' rights from the academics and thinkers regarding its normative and pragmatic value.

While some hails it as a landmark being the first of its kind across the world, some others critique it as incapable of producing any significant outcome for farmers (Gopalakrishnan 2001).

The appreciation of the PVP Act, mainly, is based on the fact that farmers' rights have been incorporated as a separate chapter recognising some of the core rights of farmers. Whereas the critique is mainly based on the fact that the PVP Act treats farmers at par with modern commercial breeders. This approach does not take into consideration the essential difference in working, preferences and concerns between modern commercial breeding and the traditionally farming system. These two systems rely on and promote different knowledge systems and identify innovations differently and reward inventors in different ways (Cullet 1999). This could be explained with two points.

First, the modern commercial breeding industry seeks rewards mainly in the form of financial benefits, whereas the established farming practices do not concentrate exclusively on financial incentives. Second, knowledge produced through farming practices cannot easily be attributed to a single farmer or a group of farmers. To put it another way, farmers' knowledge is often less individualistic than scientific knowledge produced in the laboratory (Cullet 1999).

It could be seen that the PVP Act does not consider this essential difference. The procedure prescribed under the Act for registration of farmers' variety could be taken as a best example to establish this gap. Even though the PVP Act does not require farmers to comply with all conditions prescribed under the Act, farmers need to produce a declaration as to the lawful procurement of genetic material or parental material to register a farmers' variety. It has been argued that this requirement does seem to be unrealistic given the farming practices followed traditionally in this country (Gopalakrishnan 2001).

It has also been argued that the equal treatment of farmers and commercial breeders under the PVP Act with regard to the registration of new varieties would do little good to farmers. Because, various conditions required to be followed in the registration of a new variety requires technical expertise. Given the social and

economical conditions of majority of farmers in India, this provision would have little effect when it comes to implementation (Cullet 2000).

The socio-economic condition of farmers will also be a matter which likely to affect the benefit sharing mechanism envisaged under the PVP Act. The PVP Act requires farmers to be vigilant and make application before the authority situated most likely far away from their place. To counter this implication, the PVP Act presupposes that non-governmental organisations would take care of this matter. However, this does not seem to be sufficient, especially given the fact that the socially and economically under privileged farmers will have to fight against big corporates having huge financial and human resources (Gopalakrishnan 2001: 115).

Regarding the procedural and administrative aspects, there could be three major critique of the PVP Act. First, the PVP Act envisages that the revenue generated from the use of farmers' variety is to be maintained by the Gene Fund and part of this money will be used for the administrative expenses of the Gene Fund. Being this a responsibility of the government, it could be argued that the whole amount should be used for the benefit of farmers. Second, the PVP Act provides for compensation to farmers from commercial breeders if the seeds purchased by farmers failed to yield as declared by the breeder. Regarding the quantum of compensation, the PVP Act gives complete discretion to the Authority. In this scenario, it could be suggested that there should be some guidelines as to the quantum of compensation such as 'it should be at least twice the projected harvest value of the crop' (Sahai 2001). Third, the PVP Act provides protection to farmers from innocent infringement of breeders' rights. Here the critical point is that the burden of proof lies on farmers. It is for the farmers to prove that the infringement was 'innocent'. This could be considered as a deviation from the general principle that the duty to prove lies on the person who alleges the violation of rights. Moreover, the PVP Act does not provide any particular reason for this deviation.

Another major critique of farmers' rights as provided under the PVP Act is related to the classic property rights of farmers. Section 39 of the Act provides that farmers are not allowed to indulge in commercial exchange of seeds of a variety protected under the Act. As per the classical property concept, a farmer has absolute control over the seeds purchased by him. Therefore, the right to exchange such seeds, whether in a

commercial or non-commercial manner, could be considered as inevitably emanating from the classic property right concept. This right has been curtailed or restricted by the PVP Act. Moreover, it is a fact that majority of seed requirement in India is met by farmer-to-farmer exchange (Rao 2004). It could be, therefore, argued that the PVP Act does not provide sufficient reason for restricting this classic property right and its implications upon agricultural economy do not seem to have considered adequately.[31]

Broadly, the major reason for these seemingly unrealistic normative and procedural manifestations could be attributed to the fact that the PVP Act was originally designed for the registration of new variety bred by modern corporate breeders. Farmers' rights were included subsequently at the instance of the Joint Parliamentary Committee without changing the rest of the provisions of the framework (Dhar and Chaturvedi 2005). Therefore, inconsistencies and contradictions are very likely both at the conceptual and procedural level. Hence, it could be suggested that there should be separate norms and procedures for the protection of farmers' rights and for the registration of farmers' variety (Gopalakrishnan 2001: 112).

Further, the presence of the Biodiversity Act makes the legal and institutional framework addressing farmers' rights in India multiple and complex in nature. This complexity is particularly apparent in the case of access and benefit sharing. A brief comparative analysis of two statutes could reveal that there is overlapping and differences between these two statutes. This might lead to obscurity at the level of implementation and realisation of farmers' rights also. Most importantly, there are three issues relevant to farmers' rights in this regard.

First, it is most likely that access to plant genetic resources will be regulated under the Biodiversity Act in accordance with mutually agreed terms with the participation of all stake holders.[32] This reveals an unclear scenario where a person or corporation intends to develop a new plant variety by using a plant genetic resource(s) in India

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[31] The classic property rights concept and its significance in the case of farmers' rights have been discussed in detail in the fourth chapter.

[32] It is to be noted that this provision shares the norms provided under the FAO Treaty which envisages right to participation as an important content of farmers' rights.

should seek prior permission from the National Biodiversity Authority in consultation with farmers and local communities and the consequent new plant variety will be registered under the PVP Act. Since, the PVP Act also contains norms regarding benefit sharing, it is most likely that farmers have to apply afresh before the Protection of Plant Varieties and Farmers' Rights Authority for benefit sharing. Here the critical question is the relevance and legal validity of terms and conditions entered into as part of approval by the National Biodiversity Authority regarding benefit sharing when a farmer or a farming community approach the Protection of Plant Variety and Farmers' Rights Authority for benefit sharing. Another problem arise in this context is the presence of more than one forum to address single issue.

Second issue is related to the difference in the scope of benefits. It is already noted that the PVP Act envisages only monetary benefits. Whereas the Biodiversity Act enlists a number of benefits other than monetary compensation. This raises a number of questions such as whether farmers can approach two different statutory authorities to claim benefits related to a single issue and whether the registered owner of the plant variety under the PVP Act can be held liable to share benefits under the Biodiversity Act on the basis of the instrument of prior approval?

Third issue is related to the difference in the ways in which monetary benefit is to be dispensed. The PVP Act does not provide any direct rights in this regard by providing that monetary compensation is to be deposited in the Gene Fund. At the same time, the Biodiversity Act, to some extent, recognises the right of the claimers to receive monetary compensation directly. Here again the question comes whether farmers can choose the forum to claim monetary compensation? Even if this is possible at a theoretical level, it may be very difficult to happen in practice given the socio-economic condition of most of the farmers in India.

A probable solution to these overlapping and conflicting regimes is an effective co-ordination between two statutory frameworks. This could be facilitated by a new regulation or guideline on access and benefit sharing by the central government by incorporating all relevant norms such as prior informed consent, mutually agreed terms and an expanded list of benefits. The impediment of socio-economic conditions of farmers and local communities could be addressed by envisaging a

pro-active role for statutory bodies to ensure that relevant norms are followed in meaning and spirit. In fact the Biodiversity Act already follows this approach by entrusting the duty on the Biodiversity Authority to ensure mutually agreed terms between the user, local communities and claimers.

5.5 New Challenges

Legal regime in India related to plant genetic resources is still in an evolving stage. Some of these ongoing initiatives in this regard pose challenges to farmers' rights as well. Of which two important challenges are the proposed Seeds Bill, 2004 and the initiatives towards the protection of traditional knowledge.

5.5.1 Seeds Bill, 2004

Organised seed programme in India began with the implementation of the Seeds Act, 1966. The major purpose of the Seeds Act was to regulate the quality of seeds for sale. For this purpose, the Seeds Act provides for the registration of seeds for sale (The Seeds Act: Section 7). The Seeds Act provides certain quality criterions to be followed in order to qualify for registration. Nevertheless, the Seeds Act is not applicable to all kinds or varieties of seeds. The regulation under this legislation is applicable only to 'notified seeds'. The power to notify seeds vests with the central government (Ibid: Section 5).

The limited scope of the Seeds Act coupled with recent changes in science and technology and the need for the enhancement of food production seem to have triggered the revision of seed regulation in India. It is in this background that the Seeds Bill was introduced in the Rajya Sabha on 9 December 2004. The Seeds Bill seeks to repeal and replace the Seeds Act, 1996.

The primary objective of the Seeds Bill is to regulate the quality of seeds so as to make available sufficient good quality seeds for farmers. Like the Seeds Act, 1966, the Seeds Bill also seeks to achieve this object through a registration system. At the same time, the Seeds Bill moves beyond the Seeds Act, 1966 by making it applicable to "all kinds and varieties of seeds".

The Seeds Bill envisages two kinds of registration systems. First, registration of all kinds and varieties of seeds meant to be sold is mandatory. In order to get registration certificate, the concerned seed should conform to the quality requirements specified under the Bill (Seeds Bill: Section 6 and 25). Second, the Seeds Bill makes registration of every dealer, producer and seed processing mandatory. The Seeds Bill specifies the transactions which are covered under the framework. They are: selling, keeping for sale, offering to sell, bartering, import or export or otherwise supply any seed by himself, or by any other person (Ibid: Section 22.1). Hence, the Seeds Bill seeks to ensure the quality, availability, efficacy and safety of seeds through a compulsory registration system.

The proposed Seeds Bill, if enacted, would have severe implications upon farmers' rights. The link between the Seeds Bill and farmers' rights can be explained in the following ways. First, the Seeds Bill does not make any distinction between commercial seed producers and farmers. The Seeds Bill defines the term dealer as "a person who carries on the business of buying and selling, exporting, or importing seed, and includes an agent of a dealer" (Ibid: Section 2.7). As such this definition is wide enough to cover farmers who sell their farm saved seeds.

Second, the activities which require registration under the Seeds Bill include bartering also. In all probability this provision would have severe implication on the traditional practice of seed exchange between farmers. Altogether the registration system as provided under the Seeds Bill is tends to restrict the right of farmers to sell and exchange their seeds.

Third, the above said two implications are, however, diluted under Section 43 of the Seeds Bill. Section 43 makes the right of farmers to save, use, exchange, share or sell farm seeds and planting material an express exemption from the registration process. However, this exemption is subject to a proviso which says that a farmer cannot sell seeds under a brand name or seeds which do not conform to the minimum limit of germination, physical purity and genetic purity as prescribed under the Seeds Bill.

It could be seen that the proviso, in effect, makes the first part of the section ineffective. It would be very difficult for small scale farmers to establish technical criterions. Hence, it is likely that the Seeds Bill would leave the seeds market

exclusively for commercial breeders. Moreover, this provision is directly in contradiction to the PVP Act. The condition that seeds should be in conformity with minimum limit of germination, physical purity and genetic purity as prescribed under the Seeds Bill is an additional condition when compared to the PVP Act. This is an instance wherein an act by a farmers completely authorised under the PVP Act may become unauthorised under the Seed Act. This means the concerned provision under the PVP Act would become meaningless in this regard as soon as the new Seed Act comes into force.

Fourth, the Seeds Bill provides farmers the right to claim compensation if registered seeds purchased by a farmers fails to perform as per the disclosure made by producer, distributor or vendor (Ibid: Section 20). The Seeds Bill entitles farmers in such situations to claim compensation under the Consumer Protection Act, 1986. This is an area where the Seeds Bill overlaps with the PVP Act. Right to compensation in case of default seeds is also provided under the PVP Act. However, the difference is that, under the PVP Act, claim of compensation will be decided by the Authority constituted under the PVP Act. Hence, this is another obvious instance of lack of harmony between the PVP Act and the proposed Seeds Bill.

Some of these issues related to farmers' rights have been addressed by the parliamentary standing committee (hereafter 'the Standing Committee') mandated to look at the Seeds Bill. The Standing Committee Report recommends that farmers' variety should be entirely excluded from the registration process. Regarding farmers' right to use, sell and exchange farm saved seeds, the report suggests that it should be in harmony with the PVP Act. The Report in this regard suggests the deletion of quality requirements required to be followed by farmers to sell or exchange farm saved seeds. Further, the report recommends that the right to compensation should be decided by a tribunal or authority constituted for this purpose rather than the authority under the Consumer Protection Act (Government of India 2006).

Hence, it is clear that the proposed Seeds Bill, if enacted in the present form, would limit the scope of farmers' rights in India. Further, if the potential conflict with the PVP Act is not addressed properly, it would add to the already existing problem of multiplicity of legal and institutional framework.

5.5.2 Protection of Traditional Knowledge

A comprehensive legal regime for the protection of traditional knowledge in India is yet to be developed. So far as the existing statutory frameworks are concerned, there are some provisions in certain statutes which cover the issue of the protection of traditional knowledge to some extent.

The PVP Act does not mention the protection of traditional knowledge as such. The only provision under the PVP Act that could be interpreted as capable of covering traditional knowledge is Section 41. This provision, unlike other provisions under the PVP Act, does not limit its application to plant genetic resources. It recognises the right of local communities to claim compensation for their 'significant contributions'. The term 'significant contributions' could be interpreted as covering traditional agricultural knowledge also. However, this provision is unlikely to have any significant practical effects primarily due to its vagueness.

The Biodiversity Act also does not address traditional knowledge expressly. However, the possibility of reading the protection of traditional knowledge under the Biodiversity Act is more promising than the PVP Act. The application of norms and procedures enshrined under the Biodiversity Act is not limited to biological resources. In fact the Biodiversity Act uses the term 'knowledge' also. For instance, the provision in the Act regulating access uses the term 'biological resources and knowledge thereto' (Biodiversity Act: Section 3). The Biodiversity Act also expresses the aspiration for an explicit protection of traditional knowledge. This is evident in the provision which says that 'central government shall endeavor to respect and protect the knowledge of local people relating to biological diversity' (Biodiversity Act: Section 36.5).

Howsoever oblique these expressions may be, it could be seen as a reference to the protection of traditional knowledge related to biological resources which includes traditional agricultural knowledge. This could also be seen as express admission of lack of explicit and effective provision for protection of traditional knowledge. Indeed the government has started some initiatives in this regard particularly the establishment of Traditional Knowledge Digital Library (TKDL). While this can be considered as a good beginning, this system in the present stage cannot be

considered as helpful to traditional farmers because it covers mainly knowledge regarding medicines particularly Ayurveda.

Indian patent law also, to some extent, addresses the issue of traditional knowledge. Indian Patent Act provides that an invention which, in effect, is traditional knowledge or which is an aggregation or duplication of known properties of a traditionally known component or components is not to be deemed as invention capable of being protected under the Act (The Patents Act: Section 3.p). This provision does not provide any positive right to the traditional knowledge holders. Instead, it could be seen as a measure to defeat the commercial misuse of traditional knowledge (Sagar 2005: 395).

It can be said that the existing provisions under Indian laws covers two main aspects of traditional knowledge protection though to a limited extent. These are prevention of misappropriation and benefit sharing. At the same time the existing legal provisions have been criticised that these provisions significantly fall short of dealing with the protection of traditional knowledge (Sagar 2005: 395). This critique seems to be based on the lack of property rights to traditional knowledge holders.

The existing statutory frameworks in India do not address the protection of traditional knowledge completely. While some of the existing statutory provisions could be used to provide defensive protection, specific statutory framework for the protection and management of traditional knowledge is yet to be evolved. Therefore, the scope of farmers' rights in India is yet to be determined to the extent it relates to the protection of traditional agricultural knowledge.

5.6 Summation

Farmers' rights regime in India shares norms with international law at least to some extent. First, both legal frameworks recognise the valuable contributions of farmers in conserving and improving crop genetic materials and maintaining agricultural biodiversity as the major basis of legal protection of farmers' rights. Second, the major legal consequence of farmers' rights under international law and in India is designed in the form of compensation for farmers' contributions towards the development and maintenance of agricultural biodiversity. In this regard both legal

frameworks give major emphasis on benefit sharing. Third, the protection of traditional farming practices in the form of right to sow, resow, exchange and sell are recognised in principle under both legal frameworks.

Even though there are many convergences at the normative level, there are at least two points where key divergences could be found. First, multilateral treaty regimes recognise protection of traditional knowledge as an important tool towards the recognition and protection of farmers' rights. Farmers' rights regime in India does not expressly provide for the protection of traditional knowledge. In fact, the idea of a specific legal protection of traditional knowledge is still in the process of evolution both at the international level and in the Indian context.[33]

The second point of divergence is related to right to participation. The FAO treaty envisages right to participation at two levels- right to participate equitably in sharing benefits arising out of the use of plant genetic materials and right to participate in decision making related to the use of plant genetic materials. This right to participation is generally not provided under the PVP Act. Hence, it could be said that India lags behind in complying with obligations arising out of the FAO treaty at least in the above said two key aspects.

In a domestic law point of view, farmers' rights in India suffer from multiple legal and institutional frameworks, particularly because of lack of harmony between these legal frameworks. Some of the ongoing developments such as the proposed Seeds Bill may further add to these already existing inconsistencies. Therefore, the effective realisation of farmers' rights in India depends upon the nature of the outcome of the ongoing efforts on framing a legal regime for the protection of traditional knowledge and the extent of co-ordination between all these related statutory frameworks.

[33] However, the incorporation of the legal norm of benefit sharing under the PVP Act could be considered, at least to some extent, as a legal measure towards the protection of traditional agricultural knowledge. *See* Cullet 2005: 309.

CHAPTER 6

CONCLUSION

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The idea of farmers' rights as emerging under international law generally denotes the rights of farmers over their crop genetic resources and seeks to achieve mainly three objectives, namely: enable farmers to conserve and improve crop genetic resources, crop genetic diversity and knowledge and innovations related to it; prevention of misappropriation of genetic resources and knowledge conserved by farmers and farming communities over several centuries; and fair and equitable sharing of benefits arising from the use of genetic resources and knowledge conserved and improved by farmers.

The evolution of the concept of farmers' rights could be traced back to the adoption of the International Undertaking on Plant Genetic Resources in 1983. The International Undertaking as it was originally adopted does not refer to the term 'farmers' rights'. Farmers' rights, however, became a part of the regime on plant genetic resources for food and agriculture through the adoption of a resolution on farmers' rights by the FAO Council in 1989 (Resolution 5/89). This resolution on farmers' rights was annexed to the International Undertaking and thus it became an integral part of the International Undertaking.

The FAO Council Resolution 5/89 recognises the past, present and future contributions of farmers in the conservation and improvement of plant genetic resources as the basis of farmers' rights. It was further provided that farmers' rights are vested in the international community as a trustee.

The major achievement of the International Undertaking was that farmers' rights have been defined for the first time in an instrument at the international level. At the same time, the International Undertaking failed to move beyond formally recognising farmers' rights. To mitigate this shortcoming, there was an attempt to establish an international fund in 1991 through the FAO Council Resolution 3/91. However, the international fund never materialised.

It is in this context that the revision of International Undertaking was initiated under the auspices of the FAO. One of the important objectives of the revision process was the further development and concretisation of farmers' rights. The revision process was initiated in 1994. Initially the idea was to adopt a new agreement in 1996. However, the negotiation prolonged till the adoption of the FAO Treaty in 2001.

Farmers' rights were a contentious issue during the negotiations of the FAO Treaty. Developed and developing countries had diametrically opposite views on some of the key issues during the negotiation. At a broader level while developed countries sought to avoid a strong articulation of farmers' rights, developing countries pushed for the inclusion of the idea of farmers' rights with wide meaning and scope.

The proposal submitted by the developing countries during the negotiation consisted of a number of concerns such as collective rights of farmers, protection of traditional rights of farmers to use, exchange and sell farm saved seeds and fair and equitable benefit sharing. Developing countries also attempted to include the revision of intellectual property rights systems and seed laws so as to bring it in harmony with the concept of farmers' rights.

After seven years of negotiations, the FAO Treaty was adopted in 2001 with a separate chapter on farmers' rights. The FAO Treaty does not define 'farmers' rights' as such. Instead, it illustrates some of the key aspects of farmers' rights such as protection of traditional knowledge, fair and equitable benefit sharing and right to participation in making decisions related to the conservation and sustainable use of plant genetic resources. The FAO Treaty further recognises the traditional rights of farmers to use, exchange and sell farm saved seeds.

The FAO Treaty is a landmark development in the evolution of the concept of farmers' rights. The FAO Treaty is the first (and until now the only) legally binding instrument at the international level which expressly contain provisions dealing with farmers' rights.

Farmers' rights have been provided under the FAO Treaty with a limited scope and application. In effect, the FAO Treaty does not create any binding obligation for member countries to implement farmers' rights. Even though some of the key aspects of farmers' rights have been illustrated under the FAO Treaty, it is expressly

provided that the ultimate responsibility of implementation of farmers' rights is on national governments.

Although the FAO Treaty directly addresses farmers' rights, there are mainly two other multilateral treaty regimes linked to farmers' rights – the Convention on Biological Diversity (CBD) and the International Convention for the Protection of New Varieties of Plants, 1961 as revised in 1972, 1978 and 1991 (UPOV). The CBD is linked to farmers' rights by addressing one of the key aspects of farmers' rights, that is, fair and equitable sharing of benefits arising out of biological resources which include crop genetic resources also. The CBD regime envisages norms such as prior informed consent and mutually agreed terms in the regulation of access to plant genetic resources and benefit sharing. Since the FAO Treaty does not go beyond simply mentioning benefit sharing as a key aspect of farmers' rights, the CBD forms a major regime related to farmers' rights in this regard.

The UPOV on the other hand provides protection for plant varieties which are new, distinct, uniform and stable. Protection under the UPOV means exclusive right to production or reproduction, conditioning for the purpose of propagation, offering for sale, selling or other marketing, exporting, importing and stocking for any of the above mentioned purposes.

These exclusive commercial rights as envisaged under the UPOV are the major intersection point where it is linked to farmers' rights. For instance, farmers who use the protected variety need to get authorisation from the right holder for all further activities and transactions covered under 'plant breeders' rights'. This means the traditional rights of farmers to use, exchange and sell farm saved seeds are negated through the expansive intellectual property rights as envisaged under UPOV.

The implications of the expansive interpretation of intellectual property rights on traditional rights of farmers are clear from the *Schmeiser case*. The worst scenario as exposed by the *Schmeiser case* is the possibility of legal action against farmers for unauthorised use of plant varieties protected by intellectual property rights even at times without their knowledge. This means, farmers' classic property rights are being subjected to breeders' intellectual property rights.

It could be seen that different multilateral treaty regimes affect farmers' rights in different ways. For instance, the FAO Treaty seeks to assert the traditional rights of farmers. At the same time the traditional rights of farmers are restricted under the UPOV. This exposes the fact that farmers' rights are more a subject of 'regime complex' than a subject of a regime. The term 'regime complex' indicates the presence of more than one legal framework or institutions addressing a single issue.

The key aspects of farmers' rights such as benefit sharing and protection of traditional knowledge as provided under the FAO Treaty are still in the process of evolution. Major developments in this regard are happening under the CBD regime and under the auspices of the World Intellectual Property Organization (WIPO).

It should be noted that the ongoing efforts under these regimes are not moving in a completely complementary manner. This is apparent in the case of ongoing developments related to the protection of traditional knowledge. The efforts under the CBD regime seek to develop a *sui generis* non-intellectual property based legal framework for the protection of traditional knowledge. At the same time efforts under the auspices of the WIPO seems to be moving towards an intellectual property rights based framework.

Hence, the issue of regime complex could be seen in the case of ongoing developments related to farmers' rights also. While it is early to judge the outcome of the ongoing developments, it is likely that farmers' rights will be increasingly affected with the issue of 'regime complex'. The effective implementation of farmers' rights will essentially depend on the complementarity between the outcomes of the above mentioned ongoing initiatives under different regimes.

The FAO Treaty negotiation shows that developing countries have taken initiatives at the international level for the legal conceptualisation of farmers' rights. Analysis of the existing multilateral treaty regimes shows that developing countries have not succeeded completely in this regard. This is clear from the way farmers' rights have been articulated under the FAO Treaty.

However, the existing multilateral treaty regimes provide ample flexibility that can be used by developing countries to frame *sui generis* legal framework for the protection of farmers' rights. This flexibility can be utilised to broaden the concept

of farmers' rights at the domestic level. This can be done by linking farmers' rights with the concept of food security and right to food. While the concept of food security is largely an international policy, right to food is an established concept under international human rights law. Hence, right to food can be used a legal basis by the developing countries to broaden the concept of farmers' rights.

Traditional rights of farmers can also be strengthened by using this *sui generis* option. The link between traditional rights of farmers and the concept of classic property rights can be a useful legal basis for developing countries in this regard. Further, the importance of traditional farming practices in the conservation and improvement of agricultural biodiversity can be a basis in broadening the scope and meaning of farmers' rights.

Organization of African Unity (OAU) has come up with a *sui generis* model in this regard - African Model Legislation for the Protection of Rights of Local Communities, Farmers and Breeders for the Regulation of Access to Biological Resources, 2000 (African Model Law). The norms provided under the African Model Law could be considered as relevant in a developing country context. This document by and large reflects the concerns presented by developing countries in their proposal during the FAO Treaty negotiation.

The African Model Law recognises and protects the customary practices of farmers. This essentially includes traditional rights of farmers to use, exchange and sell farm saved seeds. Further, the African Model Law introduces a specific kind of intellectual protection to farmers' innovations through a 'variety certificate'. Another important feature of the African Model Law in this regard is its approach to breeders' rights. Farmers' rights are not treated as exemptions to breeder's rights. The African Model Law provides for restriction of breeder's rights on various grounds such as protection of traditional rights of farmers and food security.

Farmers' rights are recognised under Indian legal system also. Legal regime related to farmers' rights in India consists of two major statutory frameworks – the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Biological Diversity Act, 2002. The Protection of Plant Varieties and Farmers' Rights Act, 2001 addresses farmers' rights directly. Major rights provided under this Act are: registration of farmers' variety, right to claim compensation for default seeds

purchased from breeders, benefit sharing and recognition of traditional rights of farmers.

The Biological Diversity Act, 2002 is linked to farmers' rights as it regulates access and benefit sharing. This Act provides norms of prior informed consent and mutually agreed terms for accessing biological resources in India by foreign citizens and companies. These norms are crucial for farmers' rights as it facilitates the fair and equitable sharing of benefits arising from the use of plant genetic resources.

The presence of more than one statutory framework makes farmers' rights in India a subject of 'regime complex'. There are several overlapping areas between the existing statutory regimes. For instance, both the Protection of Plant Varieties and Farmers' Rights Act and the Biological Diversity Act deal with benefit sharing. However, the scope of benefit sharing is significantly different under these two statutes. While the Plant Variety Protection Act talks only about monetary compensation, the Biological Diversity Act provides a number of benefits other than monetary compensation.

A probable solution to these overlapping and conflicting regimes is an effective co-ordination between two statutory frameworks. This could be facilitated by a new regulation or guideline in this regard by the Central Government by incorporating all relevant norms. The poor socio-economic conditions of farmers and local communities could be addressed by envisaging a pro-active role for statutory bodies to ensure that relevant norms are followed in meaning and spirit. In fact the Biodiversity Act already follows this approach by entrusting the duty on the Biodiversity Authority to ensure mutually agreed terms between the user, local communities and claimers.

Farmers' rights in India have not yet reached its final destination. Legal regime of farmers' rights is still evolving. Two major challenges in this regard are the proposed Seeds Bill, 2004 and the evolution of the legal framework for the protection of traditional knowledge. While it is too early to analyse the ongoing developments regarding protection of traditional knowledge, the Seeds Bill, if enacted in its present form, will have severe implications on farmers' rights. Some provisions under the Seeds Bill are not in harmony with the PVP Act. For instance, the Seeds Bill covers farmer-to- farmer exchange of seeds and provides that such

exchange requires authorisation from the authority established under this Act. Another important area of overlapping is regarding farmers' right to claim compensation. Hence, it is very important that the evolving statutory frameworks need to be brought in harmony with existing statutes. Otherwise the presence of multiple legal and institutional frameworks will weaken the implementation and thereby affecting the interests of farmers.

REFERENCES

REFERENCES

(❖ - Indicates primary sources)

- Adi, Bongo (2006), "Intellectual Property Rights in Biotechnology and the Fate of Poor Farmers' Agriculture", *The Journal of World Intellectual Property,* 9 (1): 91–112.

❖ African Model Legislation for the Protection of Rights of Local Communities, Farmers and Breeders for the Regulation of Access to Biological Resources, 2000, URL: http://www.africa-union.org/root/au/AUC/Departments/HRST/biosafety/DOC/doc1/AML%20ON%20COMM%20RTSLAW-Eng-Communities%20Rights-Access.doc.

❖ Agenda 21, *in* the Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol. I), Annexure II (1992).

❖ Agreement on Trade Related Aspects of Intellectual Property Rights, 1994, 1869 UNTS 299; 33 ILM 1197 (1994).

- Andersen, Regine (2005a), The History of Farmer's Right: A Guide to Central Document and Literature, Lysaker: The Fridtjof Nansen Institute.

- Andersen, Regine (2005b), The Interplay Between International Agreements Pertaining to the Management of Plant Genetic Resources for Food and Agriculture and the Response of Developing Countries, Paper presented at the annual meeting of the International Studies Association, Hilton Hawaiian Village, Honolulu, Hawaii, 5 March 2005, URL: http://www.allacademic.com/one/isa/isa05/index.php?cmd=Download+Document&key=unpublished_manuscript&file_index=2&pop_up=true&no_click_key=true&attachment_style=attachment&PHPSESSID=64f8bef74a2c820c825d1c81ced725dc.

❖ Approval of the First Projects under the Benefit-sharing Fund, document of the Third Session of the Governing Body held in Tunis, Tunisia, 1 to 5 June 2009, Doc. No. IT/GB-3/09/Inf. 11.

❖ Biological Diversity Act, 2002 (India)

- Bjørnstad, Svanhild-Isabelle Batta (2004), Breakthrough for 'the South'? An Analysis of the Recognition of Farmers' Rights in the International Treaty on Plant Genetic Resources for Food and Agriculture, Lysaker: The Fridtjof Nansen Institute, FNI Report 13/2004.

- Blakeney, Michael (2002), "Protection of Plant Varieties and Farmers' Rights", *European Intellectual Property Review,* 24(1): 9-19.

- Borowiak, Craig (2004), "Farmers' Rights: Intellectual Property Regimes and the Struggle over Seeds", *Politics & Society*, 32 (4): 511-543.

- Boyd, Shari L. et al (2003), "Agricultural Biotechnology Innovation versus Intellectual Property Rights: Are Developing Countries at the Mercy of Multinationals?", *Journal of World Intellectual Property*, 6(2): 211-232.

- Brush, Stephen B. (1992), "Farmers' Rights and Genetic Conservation in Traditional Farming Systems", *World Development*, 20(11): 1617-1630.

- Brush, Stephen B. (1992), Farmers' Rights and Protection of Traditional Agricultural Knowledge, Washington, D.C.: International Food Policy Research Institute.

- Brush, Stephen B. (2007), "Farmers' Rights and Protection of Traditional Agricultural Knowledge", *World Development*, 35(9): 1499-1514.

- Chandrashekaran, Shanti and Sujata Vasudev (2002), "The Indian Plant Variety Protection Act Beneficiaries: The Indian farmer or the Corporate Seed Company?", *Journal of Intellectual Property Rights,* 7: 506-515.

- Chiarolla, Claudio (2006), "Commodifying Agricultural Biodiversity and Development-Related Issues", *The Journal of World Intellectual Property*, 9(1): 25-60.

- Commission on Human Rights, Sub-Commission on Prevention of Discrimination and Protection of Minorities, "The Realization of Economic, Social and Cultural Rights", updated study on the right to food, submitted by Mr Asborn Eide, E/CN.4./Sub.2/1999/12, June 28, 1999.

- Commission on Plant Genetic Resources (1985), The Report of the Commission on Plant Genetic Resources, Rome, First Session, 11-15 March 1985, CPGR/85/REP.

❖ Convention for the Protection of New Varieties of Plants (UPOV), Paris/Geneva, 2 Deceember 1961, 23 October 1978 and 19 March 1991.

❖ Convention on Biological Diversity, 1992, 1760 UNTS 79; 31 ILM 818 (1992).

- Correa, Carlos (1994), "Sovereign and Property Rights over Plant Genetic Resources", *Agriculture and Human Value*, 12(4): 58 -79.

- Correa, Carlos M. (2000), Options for the Implementation of Farmers' Rights at the National Level, Trade-related Agenda, Development and Equity (TRADE) Working Paper 8 (December 2000).

- Correa, Carlos M. (2006), "Considerations on the Standard Material Transfer Agreement under the FAO Treaty on Plant Genetic Resources for Food and Agriculture", Journal of World Intellectual Property, 9(2): 137-165.

- Cottier, Thomas and Marion Panizzon (2004), "Legal Perspectives on Traditional Knowledge: The Case for Intellectual Property Protection", *Journal of International Economic Law*, 1(4): 371- 400.

- Cottier, Thomas (1998), "The Protection of Genetic Resources and Traditional Knowledge: Towards More Specific Rights and Obligations in World Trade Law", *Journal of International Economic Law*, 7(2): 555-584.

- Cullet, Philippe (1999), "Revision of the TRIPS Agreement Concerning the Protection of Plant Varieties". *The Journal of World Intellectual Property*, 2 (4): 617-656.

- Cullet, Philippe (2000), "Farmers' Rights in Peril", *Frontline*, 1 April 2000.

- Cullet, Philippe (2004a), 'Intellectual Property Rights and Food Security in the South', *Journal of World Intellectual Property*, 7(3): 261- 286.

- Cullet, Philippe (2004b), "Farmer Liability and GM Contamination: Schmeiser Judgment", *Economic and Political Weekly,* 39(25): 2551–2554.

- Cullet, Philippe (2005), *Intellectual Property Protection and Sustainable Development*, New Delhi: Lexis Nexis.

- Cullet, Philippe (2009), "Environmental Justice in the Use, Knowledge and Exploitation of Genetic Resources", in Ebbesson, Jonas and Phoebe Okowa (eds), *Environmental Law and Justice in Context*, Cambridge: Cambridge University Press.

- De Beer, Jeremy (2005), "Reconciling Property Rights in Plants", *Journal of World Intellectual Property*, 8(1): 5-31.

- Dhar, Biswajit and Chaturvedi, Sachin (2005), "Introducing Plant Breeders' Rights In India: A Critical Evaluation of the Proposed Legislation", *Journal of World Intellectual Property,* 1 (2): 245 – 262.

- Drahos, Peter and John Braithwaite (2003), "Hegemony Based on Knowledge: The Role of Intellectual Property", *Law in Context,* 21: 204-223.

- Dutfiled, Graham (2005), "Sharing the Benefits of Biodiversity: Is there a Role for the Patent System?", *The Journal of World Intellectual Property*, 5(6): 899-931.

- FAO (1974), Report of the World Food Conference, Rome: Food and Agricultural Organization.

- FAO (1987), 'Report by the Chairman of the Working Group on its Second Meeting', Report of the Second Session of the Commission on Plant Genetic Resources, CL 91/14, Appendix F, as cited in Andersen, Regine (2005), The History of Farmer's Right: A Guide to Central Document and Literature, Lysaker: The Fridtjof Nansen Institute.

- FAO (2000), The State of Food Insecurity in the World, Rome: Food and Agricultural Organization.

- FAO (2002), Report of the 123rd Session of the FAO Council, Rome: Food and Agricultural Organization. Fowler, Cary et al (2001), "Unequal Exchange? Recent Transfers of Agricultural Resources and their Implications for Developing Countries", *Development Policy Review*, 19(2): 181-204.

- FAO (2004), Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, Adopted by the 127th Session of the FAO Council in November 2004.

- FAO (2007), Report of the Second Session of the Governing Body of the International Treaty in Plant Genetic Resources for Food and Agriculture held in Rome, 29 October – 2 November 2007, Doc. No. IT/GB-2/07/Report.

- Gerstetter, Christiane et al (2007), "The International Treaty on Plant Genetic Resources for Food and Agriculture within the Current Legal Regime Complex on Plant Genetic Resources", *The Journal of World Intellectual Property,* 10 (3 & 4): 259–283.

❖ Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, adopted by the International Technical Conference on Plant Genetic Resources, Leipzig, Germany, 17–23 June 1996.

- Gopalakrishnan, N.S. (2001), "Protection of Farmers Right in India: Need for Legislative Changes", *Cochin University Law Review,* 105-116.

- Government of India (2006), Report of the Parliamentary Standing Committee on Agriculture: The Seeds Bill 2004, Report No. 22, New Delhi: Ministry of Agriculture.

- GRAIN and Kalpavriksh (2002), The International Treaty on Plant Genetic Resource: A Challenge for Asia, [Online: web] Accessed 10 January 2009, URL: http://www.grain.org/briefings/?id=37.

- Hasan, Syeda Rizwana (2004), ITPGRFA and the Protection of Farmers' Rights, South Asia Watch on Trade, Economics and Environment (SAWTEE) Policy Brief No. 9, [Online: web] Accessed 10 January 2009, URL: http://www.sawtee.org/pdf/publication/itpgrfaprotection.pdf.

- International Covenant on Economic, Social and Cultural Rights, 1966, General Assembly resolution 2200A (XXI), 16 December 1966.

- International Treaty on Plant Genetic Resources for Food and Agriculture, 2001, Rome, 3 November 2001, URL: ftp://ftp.fao.org/docrep/fao/011/i0510e/i0510e.pdf.

- International Undertaking for Plant Genetic Resources, 1983, FAO Resolution 8/83, 22nd Session, Rome, 5-23 November 1983, Doc. C83/REP.

- Jacoby, Craig D. and Charles Weiss (1997), "Recognizing Property Rights in Traditional Biocultural Contributions", *Stanford Environmental Law Journal*, 16: 74-124.

- Kameri-Mbote, Patricia and Philippe Cullet (1999), "Agro-Biodiversity and International Law: A Conceptual Framework", *Journal of Environmental Law,* 11(2): 257-279.

- Kennedy, Ronan (2006), "International Conflicts over Plant Genetic Resources: Future Development?", *Tulane Environmental Law Journal*, 20(1): 1 - 42.

- Kongolo, Tshimanga (2001), "New Options for African Countries Regarding Protection for New Varieties of Plants", *Journal of World Intellectual Property*, 4(3): 349 - 371.

- Kothari, Ashish (1994), "Reviving Diversity in India's Agriculture", *Seedling*, December 1994.

- Liu, Yinliang (2007), "Justification of Subject-matter for Legal Protection of Traditional Knowledge", *European Intellectual Property Review,* 29(11): 456-460.

- Mechlem, Kerstin (2004), "Food Security and the Right to Food in the Discourse of the United Nations", *European Law Journal*, 10(5): 631- 648.

- Odek, James O. (1994), "Bio – Piracy: Creating Proprietary Rights in Plant Genetic Resources", *Journal of Intellectual Property Law*, 2: 141-182.

- Oguamanam, Chidi (2007), "Agro-biodiversity and Food Security: Biotechnology and Traditional Agricultural Practices at the Periphery of International Intellectual Property Regime Complex", *Michigan State Law Review*, 1: 215 - 255.

❖ Protection of Plant Varieties and Farmers' Rights Act, 2001 (India).

- Ramanna, Anitha (2006), Farmers' Rights in India: A Case Study, Lysaker: The Fridtjof Nansen Institute.

- Ramanna, Anitha and Melinda Smale (2004), "Rights and Access to Plant Genetic Resources under India's New Law", *Development Policy Review*, 22(4): 423-442.

- Rangnekar, Dwijen (2000), Intellectual Property Rights and Agriculture: An Analysis of Economic Impacts of Plant Breeders' Rights, London: ActionAid.

- Rao, Niranjan (2004), "Indian Sees System and Plant Variety Protection", *Economic and Political Weekly*, 39(8): 845-852.

- Raustiala, Kal and David G. Victor (2004), "The Regime Complex for Plant Genetic Resources", *International Organization,* 58: 277–309.

❖ Rio Declaration on Environment and Development, in Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, UN Doc. No. A/CONF.151/26 (Vol. I), 12 August 1992.

- Roa-Rodriguez, Carolina and Thom van Dooren (2008), "Shifting Common Spaces of Plant Genetic Resources in the International Regulation of Property", *The Journal of World Intellectual Property,* 11(3): 176-202.

- Rosendal, Kristin (2006), "Balancing Access and Benefit Sharing and Legal Protection of Innovations from Biopropecting: Impacts on Conservation of Biodiversity", *The Journal of Environment and Development*, 15(4): 428-447.

- Sagar, Rajesh (2005), "Intellectual Property, Benefit-Sharing and Traditional Knowledge – How Effective is the Indian Biological Diversity Act, 2002?", *Journal of World Intellectual Property*, 8(3): 383- 400.

- Sahai, Suman (2001), "Plant Variety Protection and Farmers' Rights Law", *Economic and Political Weekly*, 36(35): 3338-3342.

- Sahai, Suman et al (2005), Farmer's Perception of Agrobiodiversity: A Study in North India, New Delhi: Gene Campaign, as cited in Ramanna, Anitha (2006), Farmers' Rights in India: A Case Study, Lysaker: The Fridtjof Nansen Institute.

- Sedjo, Roger (1992), "Property Rights, Genetic Resources and Biotechnological Change", *Journal of Law and Economics*, 35(1):199-213.

❖ The Seeds Bill, 2004 (India).

❖ The Seeds Act, 1966 (India).

- Seshia, Shaila (2002), "Plant Variety Protection and Farmers' Rights: Law Making and Cultivation of Varietal Control", *Economic and Political Weekly,* 37(27): 2741-2747.

- Srinivasan, C.S. (2003), "Exploring the Feasibility of Farmer's Right", *Development Policy Review,* 21(4): 419-447.

- Straub, Peter (2005-06), "Farmers in the IP Wrench: How Patents on Gene-Modified Crops Violate the Right to Food in Developing Countries", *Hastings International and Comparative Law Review*, 29:187- 213.

- The Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, adopted by the International Technical Conference on Plant Genetic Resources, Leipzig, Germany 17–23 June 1996.

❖ The Patents Act, 2005 (India).

- Tsioumani, Elsa (2006), "International Treaty on Plant Genetic Resources for Food and Agriculture: Legal and Policy Questions from Adoption to Implementation", *Year Book of International Environmental Law* 15: 119-144.

❖ UN Sub-Commission on the Promotion and Protection of Human Rights (2000), The Realization of Economic, Social and Cultural Rights: Intellectual Property Rights and Human Rights, UN Doc. E/CN.4/Sub.2/2000/7.

- UNDP (1999), Human Development Report 1999: Globalization with a Human Face, New York: Oxford University Press.

❖ United Nations Committee on Economic, Social and Cultural Rights (1999), General Comment 12- The Right to Adequate Food, UN Doc. E/C.12/1999/5.

❖ United Nations Committee on Economic, Social and Cultural Rights (1990), General Comment No. 3, The Nature of State Parties Obligation (Article 2, Para.1 of the International Covenant on Economic, Social and Cultural Rights), UN Doc. No. E/1991/23 (1990).

❖ United Nations High Commissioner for Human Rights (2000), Intellectual Property Rights and Human Rights, Sub-Commission on Human Rights Resolution 2000/7.

❖ United Nations Millennium Declaration, UN General Assembly Resolution, UN Doc. A/Res/55/2 (2000).

❖ Universal Declaration of Human Rights. G.A. Res. 217A (III), U.N. Doc A/810 (1948), 993 UNTS 3; 6 ILM 368 (1967).

❖ Rome Declaration on World Food Security, Adopted at World Food Summit, Rome, 13-17 November 1996.

❖ World Food Summit Plan of Action adopted in the World Food Summit, Rome, 13-17 November 1996. Full text of the World Food Summit Plan of Action is available at URL: http://www.fao.org/docrep/003/w3613e/w3613e00.HTM.