



Transfer of Genetic Materials and The community Rights protection Under the Ethiopian laws

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Abstract

Right to use to genetic materials and community rights protection is one of the blazing issues at every state and communities all over the globe. Currently, however, countries those have apparent policy guidelines concerning conservation and sustainable uses of genetic materials as well as for the benefit sharing from the utilization of the resources with the community rights protections are few in number. Now days, the issue is becoming a crucial point to guarantee sustainable development, conservation and use of genetic resources. Thus, to achieve these goals, it is vital for states that they should effectively and efficiently put into practice the laws within their jurisdiction taking into account the principles of the international treaties in general. Taking this reality into consideration, Ethiopia has been attributed to the enactment of the 2006 ABS law that compels the contracting parties to conduct the ABS agreements. However, the two laws, that is the access to genetic resources community knowledge and right law and the plant breeders' right law has made short comings on the rights of the community even though the contents of these laws are not compliant with that of international convention and treaty and the Ethiopian constitution. Therefore, this research aims to bridge the gaps through forwarding recommendations for the identified loopholes in relation to access to genetic resource and benefit-sharing, community rights and knowledge. In this regard, the Ethiopian ABS law needs to be incorporating the rights of the community which are provided in international treaties and the Ethiopian constitution to overcome the existing shortcomings.

The law suspends the agreements of teff and veronica genetic resources until ABS law enactment will be held. Thus, the existing Ethiopian laws to access to genetic resources doesn't guarantee the right to prior informed consent.

Key words: *Access, Genetic Materials, Benefit sharing, community Rights , knowledge, Ethiopia.*

1. Introduction

Genetic materials was considered as the "common heritage of mankind" and were exchanged generously among the countries extensively Governments used to permit access to genetic materials found within their jurisdiction and to allow their export for the aims of plant breeding or conservation, and scientific research, free of any payments.

The development of science, technology, and the demand of genetic materials forced and enabled developed countries to consider and manipulate developing countries the diverse of genetic materials. They also devised the intellectual property, rights, and mechanisms, to protect and give them economic value with market benefits accruing to industries in their countries. Such conditions forced developing countries to raise questions and begin to voice for their concerns for the benefit derived from the accessing of their own genetic materials This laid cornerstone and contributed for the development of Biological Diversity convention.

Ethiopia is a center of origin and diversity of different crops and animals genetic resources. It has contained diversity of ecosystems with in the country. "There are between 6500 and 7000 higher plant species" which are found in Ethiopia; and which accounts about 12% are endemic.¹ There is a enormous variation in the farmers' varieties of different crops. There are around 100 and more crop plant species produced.² However, these species and other breeds populations which are recorded as indigenous to the country have been threaten, because of "deforestation, land degradation, over exploitative overgrazing, habitat loss (and to some extent), and water pollution."³ To overcome and sustain these genetic resources, the Ethiopian millennium initiative has plaid a great role in recovering the degraded lands by trees; however, there has been lack of attention to the continues protection activities has . The country is also experiencing in the in-situ maintenance of crop genetic diversities which are characterized by localized or decentralized

¹ Convention on Biological Diversity, Ethiopian's 4th country Report, institute of Biodiversity conservation, Addis Ababa, 2009, P.15

²Id.

³Id.

systems with the participations of farmers', non- government organs, and other sectors.⁴ The CBD has given clear obligations and responsibilities for on-farm conservation, accordingly, even if there is no scientific system for on-farm conservation of the genetic resources. There is still conservation by agro biodiversities on-farm in Ethiopia.⁵ It is also that genetic diversity of local varieties for example: crops are the most immediate beneficial and "economically valuable portion of global diversity".⁶ Farmers utilized these traditional varieties as a main component of their cropping ways. Globally, it was estimated that these farmers account for about 60% of agriculture land use, and providing to 15-20% of the world food in general.⁷ Out of these farmers, the contributions of Ethiopians' community are great.

There are various problems with regard to implementation of access and benefit sharing. Some of the problems are related to the legislations, practical application of the rights of the communities, and the government trend in terms of not allowing the community to participate. As per the proclamation no. 482/2006 and CBD, whether or not, the negotiations on the benefit sharing are in the participations and decisions of the community's leaders. Therefore, the study assessed and showed how the communities' rights had been implemented in line with the principle of fair and equitable. The way in which communities are participated in decision making as far as their right to share benefits derived from their genetic resources should be concerned. Thus, based on the mentioned backgrounds, the study will try to assess, the problems expressed in the subsequent part of the paper.

Based on this background and its importance, Ethiopia adopted regulatory laws to access genetic resources. This study examines, whether or not existing ABS law of Ethiopia enables best open for access to genetic resources, protects communities knowledge, rights and benefit. Besides, the study examines whether or not the access agreements achieve the benefits intended in the forms of monetary and /or non-monetary in order to enhance and conserve the genetic resources in the Country or not.

The study addressed the conceptual understandings on access to genetic resources, benefit sharing, community knowledge and rights it assesses the development of these issues. Policy and legal instruments for access to genetic resources benefit sharing, and community knowledge

⁴ FDRE, third national Report on implementation of UN convention on combat desertification Addis Ababa, 2004. P.4

⁵David wood, Jillian M-Lenne, the conservation of agro biodiversity on-farm; questioning the emerging paradigm, Journal of Biodiversity and conservation, (Springer Netherlands publisher), Vol.6, Number 1January 1997.P.1.

⁶Id.

⁷ Id

and rights were addressed in the third chapter. Further, discuss policy and legal instruments at International level and regional level.

International and national institutional arrangements for access to genetic resources benefit sharing, community knowledge and rights were addressed under chapter four. Different International and national institutions were involved in the ABS issues. Finally, results, discussions including conclusion and the recommendations were dealt under chapter five.

2. Data base and methods of the study

The study depends on the analysis of the study materials that are conventions, laws, policies, Books, internet, official reports of different government authorities and other sources. It was mainly by analytical methods to this end the Ethiopian access to genetic resources, community knowledge and rights, the convention on Biological Diversity, the African model law on community, farmers, and plant Breeders' rights and access to biological resources and the plant breeders' rights laws were discussed with other Articles if any. The next step was conducting interviews in relevant government officials to collect first hand information. Accesses to Teff and vernonia agreement documents were taken from Federal Institute of biodiversity conservation and from other relevant institutions.

3. Results and Discussions

3.1. General over view of Access to Genetic material, Benefit sharing community Knowledge and Community Rights in Ethiopia

In Ethiopia, the ownership of the genetic material is belonged to the state and the people. The sole ownership of the community knowledge should be the community itself. However, the community has no right to be prior informed consent over its genetic resource, collection or access for negotiation and contractual agreements. It has no power to make-decisions either on access to genetic resources or on access agreements. The access agreement and prior informed consents were conducted by the IBC, over the common resource, rights and interests.

The plant breeders' proclamation No. 481/2006, in its Article 6(1) provided that the farmers have no right to sell the protected Variety of plants against the granted rights under ITPGRFA, in which Ethiopia is a party. It ratified the treaty on 18th June, 2003. Farmers should have the right to control over their products. This should also include the right to exchange seed in accordance with the customary practices. They should benefit from their knowledge and experiences, these include

also access to proper markets to sell their seeds and to access technology. Pursuant to Article 6(2), the farmers cannot sell farm seed or propagating material of protected variety in the seed industry on commercial scale. From this provision, one can understand or note that the farmers have no right to sell the saved seed like as a merchant. Commercial scale means the seed which fulfill the level of quality set by the seed industry.

The proclamation No. 482/2006 does not deal for the registration of the community knowledge, but it provides non-registration of any community knowledge should not render it up protected by community rights as stated in Article 10. With respect to benefit sharing, Article 18 of the proclamation No. 482/2006, is open to miss-management. It stated, *“The kind and the amount of the benefit to be shared by the state and local community from access to genetic materials or community knowledge shall be determined case by case in each specific access agreements to be signed.”*

The proclamation No. 482/2006 suspended the two agreements made prior to the coming into force of the proclamation by article 33, that is, the two agreements are access to Teff and Vernonia; the ground of suspension is that to revise and harmonize with the provisions of this proclamation. However, on cases of dispute, the parties agreed to use other laws, CBD, relevant decisions, guidelines, laws that emanate from it, the ITPGRFA, the Bonn Guidelines and international principles relevant to resolve the issue. With respect to intellectual property rights, the IBC made an agreement that the Veronique Biotech Ltd of the UK to obtain intellectual property rights relating to inventions products or applications developed using Vernonia oil.

Concerning to the termination of the agreement, the Teff agreement does not consider termination by other than bankruptcy on the company and failure or violations of the terms of the agreement by the parties. However, it does not consider the force majors on the side of the provider, and others, like orders or resolutions may pass up on one or both. The penalty clause in the access to Teff agreement has a burden to Ethiopia. In the agreement document Article 11 it is stated that if Ethiopia granted to other parties access to Teff genetic resource without the secure/ the consent of the company, it shall pay a penalty of 50,000 Euro. Here the problem is that what if the company stayed without using the Teff material for the long period. Can Ethiopia keep silent by bounding with this agreement?

The capacity problem is observed within IBC, especially in controlling the transfer of these genetic resources by the users to third party abroad and to enforce and monitor the genetic resource and knowledge. It is also found that the IBC has no system to introduce the community

knowledge in the lower level, in place where the custodian of the resources and knowledge are found; the institute has no guidelines (guiding document) to do so. Moreover, there is less integration within between the IBC and the Stakeholders. In the two access agreements, it is observed that, only the IBC and the user have been involved in the access agreement. However, in the case of access to Teff agreement EARO was involved, but this is not enough to encourage, conservation, sustainable use, introduce and facilitate and create awareness to ABS system.

Finally, the result obtained during the study was that it needs establishment of regional ABS law and IBC. The proclamation No. 482/2006 was silent whether the proclamation itself is applicable in regional states. It merely stated the regional bodies to control and prohibit access without permission from the institute.

3.2. Discussions

The FDRE Constitution 1995 provided in Article 40(3) that the rights to ownership of the land and all natural resources in exclusively vested in the state and in the people. The proclamation, which provides for access to genetic resources, community knowledge and community rights proclamation No. 482/2006, Article 5 provides also that the ownership of genetic resources shall, vested in the state and the people. Nevertheless, the proclamation No. 482/2006, in its Article 12(1) states that access to genetic resources should be subject to the prior informed consent of the institute of biodiversity convention. The provision gives a discretionary power to the institute up on the common resources, rights, and interest. The constitution also in Article 92(3) requires that the communities to be consulted and express their views in the implementation of the environment policies. This provision demanded also the participation of communities on decision making as far as their interests and rights are concerned.

The right to be prior informed consent and right for denial of access should be recognized equally and in corresponding. Reserving the right to prior informed consent on access to genetic resource, but allowing the right to denial of access on conditions is not a genuine right. Because it results, contradiction in between the three parties the community, the state and the user. Therefore, based on the Constitution, the community shall be given the right to free prior informed consent, and shall be given a chance to participate on decision-makings, regarding to access to genetic resources and participate in negotiations and agreement.

The plant breeders' right proclamation No. 481/2006, Article 6(1) prohibits the farmers' community from sell of a protected variety of seed or use for commercial purpose. However, these rights are guaranteed by ITRGRFA. Accordingly, ITPGRFA, has granted the rights to

propagate grow, use, and allow to sell plants or the propagating materials of protected variety for use as food or for any other use.

In principle right to use includes, the right to sell, and exchange dispose to third person. This is provided in the FDRE constitution 1995's. Article 40(1) which provides the right to property shall include the right to acquire, to use and in a manner compatible with the rights of other citizens, to dispose of such property by sale or bequest or to transfer it otherwise. Therefore, these rights should be applicable for farming communities in relation to their genetic resources. A registry of the community knowledge is important. It may develop the local communities as a tool to promote, protect and either claim rights over or prevent appropriation of community knowledge. This was experienced in India (Utkarsh. G.M, 1999) under the people biodiversity registry project, by the support of the society for research and initiative for sustainable technologies and institutions which has established a Honey Bee data base of farmers' innovations and creative practice.

The CBD, in Article 8(j) requires states subject to national legislation and as far as possible and as appropriate to respect, preserve and maintain knowledge, innovations and practices of indigenous relevant for conservation and sustainable use of biological diversity and protect their wider application with the approval and involvement of the holders. The proclamation No. 482/2006 does not deal about the registries of the community knowledge, in Article 10 it stated that non-registration of any community knowledge shall not render it up protected by community rights. The expansion of some western ideology and technology may result a negative impact towards our common and different useful community knowledge and this knowledge may be eroded by assimilation with foreign culture and tradition (the impacts of globalization).

The kind and the amount of the benefit to be shared by the state and local community from access to genetic resources or community knowledge shall be determined with specific guidance. Acting without guidance may lead misuse by the individuals. It was said that "without specific guidance for benefit sharing, the significant economic potential of genetic resources constitute an incentive to corruption in their management" (Samule Ngiffo, 2001). This shows that the absence of explicit provisions in the area is not incentive for promoting of interests of the community and the state. Therefore, Article 18 of the proclamation No. 482/2006 needs some revision to be held.

Suspending contractual agreement for the purpose of revision and to harmonization with the provisions of the law, within absence of any illegality and/or immorality, or defect is unfair treatment of the contractual agreement. The very nature of the access to Teff and vernonia

agreements is based on the guidelines of the CBD and the Bonn Guidelines. The 1969 Vienna convention on the law of Treaties in its Article 27 provided about internal law and observance of treaties. It stated that, "A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty." However one may ask the terms "treaty", and "agreement" contextually they are similar meaning. Oxford dictionary defines the term treaty as "a formal agreement between people especially, when buying and selling goods or property. "Agreement is also defined as "a promise or a contract made with somebody." This is to show that the Vienna Convention will be relevant law to the agreements of Teff and vernonia. This convention in its Article 26 stated a pacta sunt servanda, which means every treaty, in force is binding upon parties to it and must be performed by them in good faith. Putting flexible conditions for the amendments of contract is better than suspending.

In Ethiopia, there is exclusion of patentability inventions with regard to plant varieties or animal varieties. The proclamation concerning Inventions, Minor Inventions, and Industrial Design Proclamation No. 123/1995 in Article 4 (1)(b), prohibit patenting of plant varieties. The exclusion includes biological process for the development of plants or animals. No patent protection system for botanical genera exists in Ethiopia in general. Ethiopia is not a member of WTO and has observer status. It has been not yet formally bound by the TRIPS agreements. It has expressed the belief that there is conflict between the CBD and TRIPS and it negotiates the deletion of Article 27(3) (b) of TRIPS the provision that provide to provide some form of IPR, protection for plant varieties. However, the IBC made an agreement that the Veronique Biotech Ltd of the U.K to obtain intellectual property rights relating to inventions products or applications developed using vernonia oil. That means, it allowed intellectual property rights over derivatives, as derivative is the products of plant.

Force major should be granted to both contractual parties to demand termination of the agreement. The Teff agreements recognize the termination due to bankruptcy on the company, and failure or violations of the terms of the agreement by the parties. Nevertheless, the agreement does not consider the force majors on the side of the provider and orders or resolutions, which may be passed up on the provider or on both. It is clear that the proclamation No. 482/2006 requires conditions for denial of access by the communities, which may be one of the cause for the termination of the agreements. The penalty clause should be taken into consideration in order to relieve the burdens upon the country. The Teff agreement imposes burden to the country. As it is stated in the agreement document Article 11, if Ethiopia granted to other parties access to Teff

genetic resource without the consent of the company, it should pay a penalty of 50,000 Euro, and this provision limited the right of the country to observe alternative opportunities.

To overcome these challenges and related issues, there must be some relevant national competent authorities (parties) to review access and benefit sharing proposals. For example, the relevant parties may be from the local communities, regional authorities, universities and others if nay. This system may have dual purposes. First, it helps to revise and over sees the proposals made by the users and the provider, whether or not the community and state interest was protected. Secondly, it helps to strengthen the integration on the activities of the access to and benefits sharing system and create awareness about ABS within different stakeholders. As it is seen, the IBC has a lack of expertise and lacks capacity, especially to control the transfer of genetic resources by the users to third party abroad and to enforce and monitor a genetic resources and knowledge.

Therefore, the Institute should focus to develop and employee skilled manpower to properly implement the law and other mandates. Experts of the Institute and its stakeholders should be empowered to address the issues, including the understanding of the scientific issues, market, legal and technological aspects of genetic resources. The Institute should co-operate especially with the users. The users may develop the capacity of the Institute itself, and its stakeholders, in order to provide information in relations with genetic resources. There should be Common understanding among stakeholders so as standardizing the contracts and information disseminations on ABS, and community knowledge and rights. They should also need to promote the involvement of academic researchers, who have been working in the fields of the conservation, sustainable utilization of genetic resource and access to and benefit sharing systems.

It is very important to establish the IBC in Regional level, and share the burdens of the Federal IBC. The proclamation No. 482/2006 should be allowed to be applied in regions or regional governments, and it should be supported by federal IBC, to enact laws for the implementation of ABS. However, states are constitutionally mandated organs to administer the land and all natural resources in their jurisdiction, as provided in Article 52(2) (d) that is beyond the controlling and prohibiting access without permission from the institute.

3.3. Conclusions

The Ethiopian government commitment to issue ABS legal frameworks should be acknowledged to use as focal point to pace forward. However, concerted efforts have to be made to reach where the status of genetic resource management expected to be which sequentially guarantee future

overall development in relation to the issue under consideration. The recognition of community rights and knowledge at least in legal framework, constitution, and establishing the institute that has been experiencing in the negotiations and entering into agreements is some of the positive starting activities. Though the community and the state became the ownership of the genetic resources and the owner of their knowledge, community has been not in a position to be consulted and pre-informed consent regarding genetic resource access and agreements.

Further, the mechanism how the community knowledge could be preserved and promoted is not also provided in the proclamation, and it does not deal about the registry of the community knowledge. The proclamation does not prescribe the kind and the amount of the benefit to be shared by the state and the community from access to genetic resources or community knowledge. The law also suspends the agreements of Teff and Vernonia genetic resources until ABS law enactment will be held. The IBC granted the intellectual rights over the derivative of plant genetic resource of vernonia. Therefore, the existing Ethiopian laws in relation to access to genetic resources are not guaranteed the right to prior informed consent and participatory decision making for the community. Moreover, the plant breeders' rights law does not allow farmers to sell protected seed varieties, which is against international treaty on plant genetic resource for food and agriculture as well as the 1995's Ethiopian constitution.

3.4. Recommendation

It is apparent that the community is the custodian of the genetic resources and associated community knowledge for long periods in Ethiopia. Therefore, they should be granted to prior informed consent for access to genetic resources and should designate which institution may give prior informed consent on access issues on behalf of them. From these points, of view, the following recommendations are forwarded to overcome the existing shortcomings.

- The government body who give prior informed consent on behalf of the community should first consult the relevant community representatives who have the custodian of indigenous genetic resource and associated knowledge;
- The constitutional right of community to participate on plans and implementation that have impact on their environment should be realized. Thus, decision making and negotiations to access agreements, including on negotiation should be conducted on the presence of the representatives of the community;

- Registry system should be established for the traditional indigenous community knowledge for future advanced preservation and promotion of these resources as well as conservation and sustainable use of the country's genetic resources;
- It should establish technological associations within the community to support the traditional system of knowledge development;
- Ethiopian Biodiversity conservation Institute should not grant the contract taker to obtain intellectual property rights over the plant genetic resources;
- The terms of the agreements relating to genetic material should be flexible for further amendments instead of suspending the implementation of the access agreements;
- The IBC should take the necessary measures to develop its capacity and stakeholders to facilitate, monitor and manage further development of the ABS system, conservation and sustainable use of the country's biodiversity;
- The government should put in place an appropriate information channel to exchange system and establish and support institutional structure at regional and Zonal level which facilitate closer interaction among communities and other stakeholders, and cooperate to develop strategic genetic resource research which aims at identifying the social economic and other factors which hinder the genetic resource management;
- The plant breeders' right to exchange sells and transfers their own protected seed varieties should be inalienable right of a citizen, unless a person commit illegally acts.

References

National legislations

Proclamation No 482/2006 a proclamation of the Access to Genetic Resources, Community knowledge and communities Rights, **FDRE, NEGARIT GAZETA**, 13th year No. 13, Addis Ababa, 27th February, 2006

Proclamation No. 1/1995, Constitution of **FDRE, NEGARIT GAZETA**, 1st year, No. 1. Addis Ababa 21st August 1995.

Proclamation No. 295/2002.a proclamation provided for the establishment of environmental protection organs , **FDRE, NEGARIT GAZETA**, 9th year No. 7, Addis Ababa, 31st October, 2002

Proclamation No. 320/2003, a proclamation to provide for the establishment of the Ethiopian intellectual property office, **FDRE, NEGARIT GAZETA**, 9th year, No. 40, Addis Ababa, 8th April 2003.

Proclamation No. 380/2004, a Proclamation to amend the Reorganization of the Executive Organs of the Federal Democratic Republic of Ethiopia proclamation; **FDRE, NEGARIT GAZETA**, 10th year No. 15 Addis Ababa, 13th January, 2004.

Proclamation No. 381/2004, a proclamation to Amend the Institute of Biodiversity Conservation and Research establishment proclamation; **FDRE, NEGARIT GAZETA**, 10th year No. 16, Addis Ababa, 13th January, 2004

Proclamation No. 481/2006, a proclamation to provide for plant Breeders' Rights, **FDRE NEGARIT GAZETA**, 12th year No 12, Addis Ababa, 27th February, 2006.

Proclamation No. 79/1997, a proclamation to provide for the establishment of the Ethiopian Agricultural Research Organization, **FDRE, NEGARIT GAZETA**, -No. 42, 5th June 1997.

Proclamation No.123/1995, proclamation to concerning Inventions, minor Inventions and Industrial designs, **FDRE, NEGARIT GAZETA**, 54th,year, No. 25. Addis Ababa, 10 may 1995.

Regulation No.4/1996, a Regulation to establish Ethiopian Health and Nutrition Research Institute, **FDRE, NEGARIT GAZETA**, 2nd year, No. 14, Addis Ababa, 15th February 1996.

Regulation No. 169/2009.Access to Genetic Resource and community knowledge and community right, **FDRE, NEGARIT GAZETA**, 15th year No. 67, Addis Ababa, 9th November 2009.

International and regional legislations (Treaties)

International treaty on plant genetic resources for food and Agriculture, Food and Agriculture organization of the United Nations (FAO) Commission on Genetic Resources for Food and Agriculture, Rome. 2001.

Secretariat of the convention on biological diversity: Bonn Guidelines on Access to Genetic Resources and Fair and equitable sharing of the Benefits arising out of their utilization, Montreal, 2002.

UN draft on the Rights of Indigenous people, 1993.

WIPO Agreements on Trade Related Intellectual Property Rights, Geneva, 2002. Regional Legislation.

African Model Legislation for the Protection of the Rights of Local Communities. Farmers and Breeders, and for the Regulation of Access to Biological Resources, Algeria, 2000.

African Regional Intellectual Property Organization, Traditional Knowledge and Expression of Folklore Regulation, 2009. Others References

Mushita, T.A: Access, Benefit sharing and Trade in Genetic resources, Community Technology Development (, no year).

Abeba Tadesse: Material Transfer agreements on Teff and vernonia, Ethiopianplaned Genetic Resources vol.2, No 4, Anrhas University. Denmark, 2009

Zakri H.A: Access to Genetic Resources, Benefit sharing and Bio prospecting United Nations university, Institute of Advance studies, Nairobi. 2007.

Abu Amara, an Slim: Allocate Effects to International Environmental studies, Urijs Universities Amsterdam, 2006

Berglund Marko: A protection of Traditional Knowledge Related to Genetic Resources; The Case for a Modified patent Application Procedure, University of Joensuu, Finland 2005.

Biber-KelemmSusette and Martinez Sylvia: *Access and Benefit sharing, Goodpractice for Academic research or Genetic resources*, Swiss academy of sciencesSwitzerland, 2006

Bo Bentsson and Carl-GustafThomstron: *Biodiversity and Future Genetic policy*. A study of Sweden world bank/ESDAR/ special/report No. 5 Washington DC, 1998.

Carlos M. Corre: *Traditional Knowledge and Intellectual property; issues and options surrounding the protection of Traditional knowledge*, A Discussion paper for the Quaker United Nations office, Geneva, 2001.

Convention on Biodiversity, *Ethiopian's 4th Country Report Institute of Biodiversity Conservation*, Addis Ababa, 2009.

Dood, David Lenneand Jillian M., Lenne: *The conservation of agro biodiversity on-farm: questioning to emerging paradigm*, *Journal of Biodiversity and Conservation* (Springer Netherlands publisher), Vol. 6, 1997.

DrisapatiBadakrishana, *Access to Genetic resource, benefit sharing and Bio prospecting*. United Nations University, UNON publishing service section, Nairobi 15014001:2004- certified 2007.

EshetayehuTefera: *Global Potentials and Challenges of some Ethiopian Germ plasm the plant Genetic resources review*, Addis Ababa, 2002

FDRE: *Third National Report on Implementation of UN Convention on Combat Desertification*, Addis Ababa, 2004.

Forest Peoples program: *Indigenous Peoples Rights to Free, Prior and informed consent and the World Bank's extractive Industries review. Article published in volume IV issue 2. Summary 2004 of sustainable development law and policies*, *Journal of the American university's Washington College of law and center for international environmental law*. New Work, 2004.

Fridtj of Nansen institute: *Information paper on Farmers rights, submitted by the Fridtj of institute, Norway Based on the Farmers Rights project. Third session of the governing body of the International Treaty on plant Genetic Resources for Food and Agriculture*. Tunis, 2009.

Garfortak and Carbera M.J., *Sustainable Biodiversity law, Global Access, Local Benefits*, CLSD legal Research paper, Montreal, 2004.

Glowka Lyle burhenue-Guilmafrancol's and etal, *A Cruit to the convention on Biological Diversity* (Ended) IVCN Gland and Comb ridge, 1996.

Government of the federal Democratic of Ethiopian, *Institute of Biodiversity Conservation, National Biodiversity Strategy and Action plan*, Addis Ababa, 2005.

HeinekeFranziskawolftcorinna: *Access to Genetic Resources and the sharing of Benefits*: Private University, Frankfurt, 2004.

Japans Biodiversity Association: *Guidelines on Access to Genetic Resources for users in Japan*, Ministry of economy, Trade and Industry (MITI) Tokyo, 2006.

Jung nij-Kuei: *Legal Aspects of prior informed consent on Access to Genetic Resources: An Analysis of Global and Local Implications towards an optimal normative construction*, university of Edinburgh. 2007.

Kalrastiala and G. victor David: *The regime complex for plant generic resources*, Sanford University, USA, 2003.

Kristin G. Rosendal: *Regulating the use of Genetic Resources between international Authorities; European Environment*. Volume 16.No.5.

Laird Sarah and Wynberg Rachel, *Access and Benefit Sharing in Practice, Trends in partnerships Across sectors*, secretariat of the Convention on Biological Diversity, Montreal, Technical series No. 38.

M.H Jhijssen, Bishaw.Z. and et'al (eds.): *Farmers, seeds and Varieties; supporting informal seed supply in Ethiopia* Wageningen international 2008

Mohammed Ali and DbduAnge: *The status of Dorcas Gazelle in Ethiopia, a paper presented in the second working on the conservation and restoration of Sahelo-saharan Antelopes*, Morocco, 2003.

Mugabe J., Kameri-Mbote P. and et'al: *Traditional knowledge, genetic resources and intellectual property protection towards a new international regime*, International Environmental Law Research Center, IELRC working paper, Switzerland, 2001.

Sullivan N. Shawn: *Plant Genetic Resource and the law, past, Present and Future*, American Society of plant Biologists, Mexico, 2004

Noab, Zerbe: *Biodiversity Conservation and Protection of Traditional Knowledge in les camels du centre de philosophie du Droit*. No. 106, 2003

Prasad PantKrishna: *Access to Genetic Resources and Benefit sharing, Perceptions, Practices and Expectations of Farming communities*, Farmers program forum for protection of Public interest (pro public), GalutamBuddhamarg, Anamnager Kathmandu, Nepal.

RegassFeyissa: *The Farmers' Rights project-Back Ground study 5: Farmers' Rights in Ethiopia*. A case study, FNI Report 7/2006, the Fridijof, Nansen institute, Lysaker, Norway, 2006.

RehminasktarTzenwong, Hay-Edie Terence and etal: *Access to Genetic Resources and benefit sharing*, UNDP, 2004.

Hornby S.A.: *Oxford Advanced Learner's Dictionary (5thed)*, Oxford University Press, New York, 1995.

Schroeder D.: *Benefit Sharing: It's time for a Definition*, center for professional ethnics, university of central Lancashire UK, 2006.

Stoianoff Natalie: *Biodiversity, Traditional knowledge and Intellectual property: Models for stakeholder Benefit sharing*, Law Tech Talk for the Faculty of law, Hong Kong University, 2008

Tauli-corpuz Victoria: *Biodiversity, Traditional Knowledge and rights of indigenous peoples, intellectual property, Rights series*. Third world Network (TWN) Malaysia, 2003.

Transey Geoff (ed.): *Trade, Intellectual property, food and biodiversity: Key Issues and options for the 1999 review of Article 27(3) (b) of the TRIPs Agreement*, Switzerland, 1999.

UNCTAD; the “*State of the Debate on*