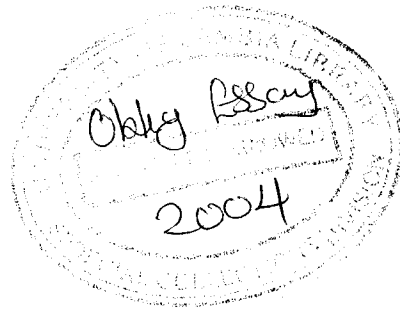




THE UNIVERSITY OF ZAMBIA

SCHOOL OF LAW

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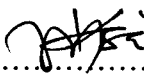
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Supervisor
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1.0 What is food security

1.1 Introduction

The right to food is recognised and adopted in several human rights treaties, declarations and is even written into the constitutions of many countries. But despite this recognition virtually all over the world, hunger persists whether caused by war, drought or poverty. It is argued that poverty although often viewed as a cause of hunger is also a consequence of it.

Food security is a right affirmed by 185 countries at the 1996 World Food Summit under the Rome Declaration on World Food Security where it was stated that food security was “the right of everyone to have access to safe and nutritious food consistent with the right to adequate food and the fundamental right of everyone to be free from hunger”

The global response to the challenges of food security has been to increase food production which in turn would increase access to food. It is estimated by the Food and Agriculture Organisation (FAO)¹ that the food industry employs 1.3 billion people in an \$11.3 trillion industry. In spite of this growth the FAO estimates that 790 million are said to be hungry and 25 per cent of these are in the Sub-Saharan region.²

The right to food, a human right, is inter linked with food security which in turn relates to state responses in this regard to agricultural policies to be adopted, economic growth and trade policies to be pursued. This paper focuses in particular on Intellectual Property

¹ FAO, The State of Food and Agriculture, Roma, 1966 www.fao.org

² Ibid, The State of Food and Agriculture, Part I Review, Current agricultural situation – facts and figures

Rights (IPR's) and its implication on the right to food. IPR's have increasingly become important in agricultural technology. IPR's have been introduced into agriculture in such areas as plant varieties and by way of the requirement to comply with the provisions contained in the World Trade Organisation (WTO) Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement which came into effect on 1 January 1995.

The first chapter of this paper examines the question, what is food security in the context of the right to food. The second chapter examines the right to food in the context of human rights and the various instruments that guarantee this right. The third chapter examines the various IPR's instruments which have an implication on the right to food. The fourth chapter discusses the implications of the various IPR's instruments on food security and the right to food. The fifth and final chapter concludes on the implication of IPR's on the right to food as analysed in chapter four.

1.2 Food Security origins

The need to achieve an adequate level of food security can be traced back to the Second World War. Real food shortages then caused disruption of agricultural production and international trade. The post war period thus saw policy measures aimed at encouraging expansion of agricultural products. Consequently, volumes of trade including agricultural and food products grew at an annual rate of 11 per cent³.

³ FAO, The State of Food and Agriculture, Roma, 1996, What is Food Security. www.fao.org

Yet food availability is a source of concern in a lot of countries in the developing world. The FAO estimates that 33 per cent of the population in the Sub Saharan region in Africa is undernourished whilst the figure for the South Asian region is 24 per cent⁴.

But what do we mean by food security? There have been various attempts to define what this term means. In the following paragraphs I have examined global, regional and local definitions of the term food security and attempted to see whether a common theme emerges there from. There are also several factors that affect food security which have to be considered in the context of any attempted definition. These factors are discussed later on this chapter.

1.2.1 FAO Definition

The FAO definition is generally acknowledged as the universally accepted definition of food security. The definition was promulgated at the World Food Summit held in Rome 1996.⁵ At that summit food security was defined as a situation “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food and to meet their dietary needs and food preference for an active and healthy life.”

From this definition there are three key underlying assumptions, adequacy of food implying effective supply; ample access to food that is the ability of the individual to acquire sufficient food; and reliability of both supply and access denoting equity of food

⁴ FAO, The State of Food Insecurity in the World (Rome: FAO, 2002)

⁵ FAO, Rome Declaration on World Food Security and World Food Summit Plan of Action, World Food Summit, 13 – 17 Nov, 1996, Rome, Italy

distribution. Another assumption is that to have a healthy life the food intake must be nutritious.

It becomes immediately apparent from the FAO's definition that there is a close link between poverty and food insecurity. As alluded to earlier it is recognised that poverty is the largest cause of food insecurity and in turn food insecurity contributes to poverty.

1.2.2 Southern African Development Community (SADC) definition

SADC is a regional co-operation consisting of a grouping of 14 Southern African countries of which Zambia is a member. It was created through a declaration and treaty signed in Namibia in 1992. The treaty's aim is to inter-alia co-ordinate the economies of member states and integrates them into a single unit. Its objectives include the achievement of development and economic growth, alleviation of poverty, enhancement of the standard and quality of lives and to support the socially disadvantaged.

Recognising that food insecurity was a major problem in the region SADC through its Council of Ministers issued a strategy under its Food, Agriculture and Natural Resources (FANR) programme intended to cover food security, agricultural and natural resources development. FANR's objectives included increasing agricultural productivity thereby contributing to improvements in food security at the household, national and regional level.

FANR's definition of food security is based on the FAO's definition and is stated as "access by all people at all times to enough acceptable food for an active healthy life".

The focus of the FANR definition is on improving access to food, food availability and nutrition. Again these are the same focal points that come out of the FAO definition.

1.2.3 Local definition

Food insecurity in Zambia is recognised and acknowledged through several policy documents. This section on local definitions focuses on three key policy documents for purposes of elucidating a common theme of the local definition.

Zambia has yet to issue a formal comprehensive policy statement on its agricultural policies. However, awaiting Cabinet approval is a draft Ministry of Agriculture and Co-operatives, National Agricultural and Co-operatives Policy covering the period 2003 – 2015 and issued in April 2004. In the draft document, food security is defined as "access by all Zambians at all times to enough of the right food for an active and healthy life on a sustainable basis."

The same definition is contained in the government's Agricultural Sector Investment Programme (ASIP) launched in 1996 in the context of policy relating to a liberalised agricultural market sector following government's previous policy of control of the sector. ASIP's objectives include ensuring national and food security. Another policy document concerned with food security and focussed on poverty is the Poverty Reduction

Strategy Paper (PRSP) issued in 2002. In that paper poverty is defined as “lack of access to income, employment opportunities, normal entitlements of consumption of goods, services, shelter and other basic needs of life.”

What is evident from these local definitions is that they follow the FAO definition on focussing on access to food, food availability and nutrition.

1.3 Factors affecting food security

We have so far defined food security and seen that from a universal, regional and local perspective food has an accepted global definition based on the FAO definition. This section examines these factors from a global, regional and local perspective.

Concerned with global security issues and in advance preparation for the World Food Summit, the Subcommittee on African Affairs tasked the International Relations and Trade Issues, National Security and International Affairs Division to report to the Committee on Foreign Relations of the United States Senate,⁶ on Food Security in Africa. The report notes that Africa at the time faced a food security dilemma as a result of a decline in its agricultural production and trade from the period of independence as a result of:

- The effects of the cold war on agricultural and rural development policies.
- Chronic civil and social strife and the displacement of populations.

⁶ Statement by Harold J Johnson, Associate Director US GAO, GAO/T-NSIAD-96-217 Issued on 31 July 1996

- The mismanagement of national resources.
- The failure to build capacity in critical areas such as policy analysis and entrepreneurship.
- Developments in the agriculture sectors and policies of industrialised countries.
- The reduction in demand for primary commodities.
- Shocks caused by the oil crises.
- Periodic droughts and
- The entry of the former Soviet Union into World Markets.

According to a comprehensive trade and development policy report which the Associate Director referred to in his report to the Senate, Africa's aspirations for growth and development were hampered by the following combination of problems:

- Flawed economic policy choices
- Political mismanagement
- An absence of democratic political institutions
- Weak private sectors stifled by dominating parastatals
- Overwhelming debt burdens
- Poverty and widespread unemployment
- Environmental degradation.

The report outlined a policy approach with the objectives of promoting trade and investment liberalisation, development of the private sector, enhancement of the

infrastructure and economic and regulatory reform. The Director pointed out though that the report contained no strategy to address the food security situation noted.

That was a glimpse at a global overview, turning to the SADC region, the Economic Research Service Unit of the United States Department of Agriculture issued a bulletin⁷ which focussed on the Sub-Saharan African region in relation to food security and underlined the following as influencing food security:

- Inadequate domestic food production that cannot be supplemented by imports due to financial constraints. This creates food gaps.
- High rate of population growth which is not matched by growth in agricultural productivity.
- Dysfunctional economies and war arising from political instability. Examples given include Liberia, Rwanda, Angola, and Zimbabwe.

The Economic Research Unit in another Bulletin⁸ notes that another factor influencing food security is trade liberalisation. The authors argue that global trade liberalisation will result in increases in world food prices (due to removal of subsidies) which will have a direct impact on the import and export capabilities of especially the low income developing countries. The developing countries will face difficulties in financing food gaps due to the high prices whilst tariff protection will hamper exports.

⁷ Agriculture Information Bulletin No. 765-1 April 2001, Food Security Assessment: Regional Overview by Shahla Shapouri and Stacey Rosen

⁸ No 765-5, Implications of Trade Liberalisation on Food Security of Low Income Countries by Michael Trueblood and Shahla Shapouri

Still on the SADC region, a local regional analyst⁹ in his review of Food Security, Agricultural Policy and Environmental Interface: An African Perspective the Case of Botswana, notes that the main issues surrounding food security in Southern African relate to:

- Food availability and the ability to acquire it at the household level resulting in high poverty rates.
- Civil wars because of no respect for the rule of law.
- Crop failure due to drought and the lack of employment opportunities.
- Limited trade between SADC members.

A final local regional SADC comment I have referred to comes from an agricultural consultant¹⁰ who comments on the factors that affect Food Security in the SADC region and lists them as:

- Armed conflicts and civil strife.
- Economic structural adjustment programmes.
- Increased frequency of and severity of droughts.
- Colonial legacies which increased the apparent inequities in resource allocation and use.
- Poor governance.
- Economic mismanagement.
- Disregard for human rights affecting right to food and food security.

⁹ Pelotshmen Moepeng, Research Fellow, Botswana Institute for Development Policy Analysis, Gaborone www.uga.edu/

¹⁰ Dr Ray Kujeka, Agricultural Consultant Southern Africa Regional Institute for Policy Studies, Harare, Zimbabwe writing on Developing New Strategies for Food Security in the SADC Region www.toda.org

On the local front the draft policy on National Agricultural and Co-operation Policy (2003 – 2015) in listing its vision, strategy and specific policies which affect food security is pertinent in highlighting perceived local factors. It lists major constraints and challenges as including:

- Poor service delivery for small scale farmers.
- Marketing constraints resulting from poor infrastructure in outlying areas.
- Lack of agricultural finance and credit.
- Weak regulatory framework and poor enforcement of legal framework.
- Unfavourable world and region markets.
- Poor accessibility and administration of land.

Independent local analysts commenting on the current food security¹¹ in Zambia provide interesting observations on the factors that they consider contribute to the food insecurity in Zambia. They believe the factors can be attributed to:

- Collapse of copper mining and therefore loss of traditional revenue to import.
- Impact of Structural Adjustment Programme (SAP).
- Lack of agricultural support.
- Unfavourable climatic conditions.
- Disease attacks.
- Inadequate market systems to move food from surplus to deficit areas.
- Impact of HIV/AIDS on productive capacity.
- Migration by men to urban areas and effect on rural incomes.

¹¹ Compiled by several analysts from institutions such as UNZA, Ministry of Agriculture on behalf of the Forum for Food Security in Southern Africa describing the food security framework in Zambia
www.odi.org.uk/food-security-forum

1.3.1 Summary on factors affecting food security

From all these observations and comments a common theme on the issues that affect food security in developing countries emerges. The following table summarises the factors seen as affecting food security from a global, regional and local perspective.

Factor cited	Relevance		
	Global	Regional	Local
Civil and social strife	✓	✓	✓
Drought	✓	✓	✓
Mismanagement of resources	✓	✓	✓
Structural Adjustment Programmes (SAP)	✓(1)	✓	✓
Financial constraints	✓	✓	✓
Market Policies – Global and Regional players and Trade imbalances	✓	✓	✓
Impact of HIV/AIDS on productivity	✓	✓	✓
High population growth v productivity	x	✓	✓
Infrastructural Impediments	x	✓	✓
Disregard of food related human rights	x	✓	x
Population migration – rural to urban	x	x	✓

(1) Viewed by developed countries as lack of policy and entrepreneurship.

If the World Summit plan adopted in 2002 on Sustainable Development (WSSD) to halve by 2015 the people who suffer from hunger and thereby achieve some measure of food security is to be achieved, all the factors cited above have to be addressed. The challenge therefore is to address the factors cited as impediments to achieving food security at all levels starting at the global level through such bodies as the FAO, UN and WTO; to the Regional level through say SADC and COMESA and to individual country levels. African initiatives such as the New Partnership for Africa's Development (NEPAD) through its comprehensive Africa Agricultural Development Region (AADP) meant to fight inter alias food security are an imperative in this regard.

Chapter 2

2.0 What is the Right to Food

The right to food is recognised in the Universal Declaration of Human Rights (UDHR) which is globally the most well known human rights instrument. This right however is also recognised in several other instruments. In this chapter we trace the history of the recognition and acknowledgement of the right to food in the various human rights instruments issued since the UDHR of 1948. We also finally enquire into the implication of this recognition.

2.1 International Instruments

2.1.1 Universal Declaration of Human Rights, 1948¹²

The UDHR in its preamble affirms the faith of all the peoples of the United Nations in fundamental human rights and pledges member states to achieve the promotion of universal respect and observance of human rights and fundamental freedoms and proclaims the UDHR as a common standard of achievement for all peoples and nations.

With regard to the right to food, Art 25 of the UDHR states “Everyone has the right to a standard of living adequate for the health and well being of himself and his family including food.....”

¹² Adopted and proclaimed by the General Assembly resolution of the UN 217A(III) of 10 December 1948

Therefore, by way of Art 25 the right to food is acknowledged in the UDHR.

2.1.2 Constitution of FAO

The Food and Agriculture Organisation (FAO) is an organisation of the United Nations. The FAO's Basic Texts, as amended in 1965, states (Art 1) that the function of the organisation is to collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture.

The FAO has a constitution and in Part A of the constitution it has a preamble which articulates the FAO's position on the right to food in the following manner, "The Nations accepting this constitution, being determined to promote the common welfare by furthering separate and collective action on their part for the purpose of:

raising levels of nutrition and standards of living of the peoples....

and thus ... ensuring humanity's freedom from hunger ..."

The focal point with regard to the right to food is on nutrition and freedom from hunger.

2.1.3 International Covenant on Economic, Social and Cultural Rights (ICESCR)¹³

The ICESCR in its preamble recognises the UDHR declaration on human rights and declares that these rights can only be achieved if conditions are created whereby everyone also enjoys economic, social and cultural rights.

The ICESCR, through its Article 2, urges member states to take steps to achieve full realisation of economic, social and cultural rights by adopting legislative measures to this effect.

Article 11 addresses how the ICESCR should deal with the right to food by stating in Para 1 that “The State parties recognise the right of everyone to an adequate *standard of living for himself and his family including adequate food.*”

Para 2 of Article 11 requires state parties to recognise “the fundamental right of everyone to be free from hunger.....” by taking measures to improve methods of production and to ensure equitable distribution of world supplies in relation to need.

The conventions referred to above represent the main international conventions making provisions in general terms for the right to food as a human right. It is interesting to observe though that the **OAU Charter** on human rights is silent on the right to food. There are however, the following conventions that address specific groups of people, and

¹³ Adopted and opened for signature, ratification and accession by the General Assembly resolution 2200 A (XXI) of 16 December 1966

are therefore noteworthy as they make provision for the right to food in some form or another as a human right.

2.1.4 Convention on the Elimination of All Forms of Discrimination Against Women (CEAFDAW) 1979

This convention was adopted in 1979 by way of General Assembly resolution 34/180 of the UN. In its preamble, the convention focuses on the right of women not to be discriminated against under the principle of equality of rights. The convention is concerned in the preamble, amongst other things, that in situations of poverty, women should have access to food.

Article 12 Para 2 specifically requires state parties to ensure that appropriate services in connection with pregnancy are provided inclusive of “adequate nutrition during pregnancy and lactation.”

2.1.5 Convention on the Rights of the Child, 1989

This convention was adopted by General Assembly resolution 44/25 of 1989 and addresses the rights of a child.

Article 24 Para 2 (C) requires State parties to pursue full implementation of the right of the child and to take measures to combat disease and malnutrition through “the provision of adequate nutritious foods.....”

2.2 Implications of Conventions

Having declared the right to food as a human right in virtually all the key UN Conventions on human rights, the question that arises is the implication of the UDHR and the ICESCR declarations.

The FAO argues¹⁴ that as the right to food is a fundamental right, the State has an obligation to ensure that at the very least, people do not starve. The FAO further state in their commentary that States should also do everything possible to promote fully, enjoyment of the right to adequate food.

The FAO's position if extended further implies that the access to food must be in sufficient quantity and quality for a healthy and active life. It also implies that the cost of the food should not be so prohibitive as to be a constraint on other socio-economic, civil and political rights.

A UN Special Rapporteur¹⁵ however quite rightly cautions that the right to food requires resources and should therefore be distinguished from abstract freedoms. This statement implies that the State has a responsibility to provide an enabling environment that can allow its people to feed themselves and avoid hunger at an affordable cost to its people. This in turn implies that other economic and social human rights such as the right to work, adequate wages, access to land etc come into play. There is therefore, a close relationship between the right to food and other economic, social and cultural rights

¹⁴ www.fao.org/Focus/E Food: a fundamental human right

¹⁵ www.fao.org/worldfoodsummit What is the right to food

which impose a significant cost on a state. The question is, can the under-developed states afford to fund the cost of these human rights?

An additional issue relates to compliance. If a state is not complying with the requirements of the UDHR, ICESCR etc on the right to food, what can its citizens do about it? The UN monitoring committee that oversees the implementation of UN conventions insisted in its 1989 report that countries should pass laws that protect the right to food¹⁶.

A commentator¹⁷ believes that passing laws can work and has quoted the landmark legal case of *Government of the Republic of South Africa v Irene Grootboom and Others*. In that case the court ruled that the Government had violated the Constitution by not making 'reasonable' provision for persons in desperate need. Apparently, the case concerned housing. But Jean Ziegler argues that the right to food enjoys similar constitutional protection so on that basis where a state does not so provide for this right, the right to food can and should be pursued in the courts.

Whilst this argument may hold where the right to food is provided for in a constitution, what happens when the constitution is silent or indeed even if it was provided for in the constitution a state has inadequate means to guarantee and satisfy this right. A much more wide ranging response than simply providing for the right to food in a legal framework is, in my opinion, required to address this vexing problem.

¹⁶ www.fao.org/worldsummit What is the right to food? See you in Court.

¹⁷ Ibid Jean Ziegler

Chapter 3

3.0 IPRs Instruments impacting on Food Security

As stated in the first chapter the introduction of IPRs in the agricultural sector has an important bearing on food security. Currently through the World Trade Organisation (WTO), IPRs in agriculture have been introduced in developing countries and this has largely, had negative consequences on food security in these countries. In this section we review the most important international IPRs instruments that concern and have an impact on Food Security. We also examine the extent to which Zambia has complied with its international obligations.

3.1 Trade Related Aspects of Intellectual Property Rights (TRIPS)

TRIPS, is a WTO sponsored agreement which came into effect on 1 January 1995 and all member states of WTO are required to comply with the provisions of TRIPS. TRIPS is a comprehensive agreement on all types of intellectual property rights. The objectives of TRIPS, as contained in its preamble, include the reduction of distortions and impediments to international trade, promotion of effective and adequate protection of intellectual property and ensuring that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade.

The main features of TRIPS are that:

- It sets out minimum standards of protection to be provided by each member state and requires identification of the subject matter to be protected, the rights to be conferred and the minimum duration of protection.
- It makes provision for dealing with domestic procedures and remedies for the enforcement of intellectual property rights. It lays down certain general principles applicable to all IPR enforcement procedures.
- It makes provision for dispute settlement between WTO member states.

TRIPS is relevant to food security in that it makes provision for the protection of Patents Rights. The Agreement provides that patent protection must be provided for inventions, whether products or processes in all fields of technology.¹⁸ In relation to agri-biotechnology, TRIPS requires all member states to introduce IPRs protection for plant varieties either by patent or an effective *sui generis* system or any combination thereof.¹⁹

Art 27(3)b is significant in the context of food security in that it allows member states an alternative to patent protection. Thus a member state can introduce a form of plant variety protection which does not exclusively focus on TRIPS obligations but allows the members state to cater for other obligations that they may have, such as the fundamental right to food, and in Zambia's case obligations under PSPR.

¹⁸ Art 27 (1)

¹⁹ Art 27 (3)b

The concern with patent protection under TRIPS for developing countries is aptly summed up by Consumers International²⁰ when it states that the fear with respect to patent protection for genetic resources of food and agriculture is that it could potentially raise the cost of seed and agricultural inputs making them unaffordable for small farmers in developing countries, especially as small farmers dominate food production in these countries. This, the NGO goes on to conclude would ultimately affect food security as there are serious implications on farmers rights to save, use, exchange and sell seeds.

Zambia signed TRIPS on 1 January 1995²¹ but has to date not fulfilled its obligation under Art 27(3) b to implement an effective *sui generis* system.

3.2 The International Convention for the Protection of New Varieties of Plants (UPOV)

UPOV was adopted in 1961, revised in 1978 and 1991 by a group of Western European Countries which sought an effective system of plant variety protection outside the patent system. Hence its focus is on plant breeders rights. It should be noted that UPOV is not a WTO product.

What is the purpose of UPOV? According to the convention, it provides a legal basis for the protection of new plant varieties. Under UPOV, protection can only be granted to a plant variety with certain characteristics. Thus the right of production, propagation, sale,

²⁰ An NGO concerned with IPR particularly in developing countries – Press briefing 17.10.2002.

²¹ Memberships accepted 15 April 1994

export, import and stocking are protected to any owner of such a right. The duration of protection is 20 years for breeders and 25 years for trees and vines.

It should be noted that UPOV has argued that the UPOV convention is an effective *sui generis* system because it meets the requirements of Art 27(3)b of TRIPS.²²

The criticisms²³ of UPOV are that the novelty condition in Art 6(1) refers more to the commercial sector rather than to technological novelty hence traditional variety maybe eliminated; denial to sell would result in loss of income; the price of seed for protected varieties would be raised; the right to save seed from the previous harvest would be lost and national food security would be compromised as the ability to produce seed would be outside the control of most developed countries.

A status report produced by UPOV dated 14 October 2004 listing state parties to UPOV reveals that Zambia is not yet party to the convention.

3.3 The International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA)

This is a Food and Agricultural Organisation (FAO) initiated treaty issued in 2001 which is binding on all member states. The objectives of PGRFA are set in its principles which

²² UPOV position paper based on an intervention in council for TRIPS- issued 19 September 2002

²³ UPOV's implications for Developing Countries by R Latif, J Arunasiri and M Ali Chowdhury

are the promotion of sustainable agriculture and food security. The treaty focuses on farmers' rights and provides a legal framework that recognises the need for conservation and sustainable use as well as the regime for access and benefit sharing. The treaty provides specifically for plant genetic resource conservation.

The treaty makes general provisions relating to the conservation, exploration collection, characterisation, evaluation and documentation of plant genetic resources for food and agriculture.²⁴ The treaty further requires members to develop appropriate policy and legal measures for sustainable use of plant genetic resources such as pursuing fair agricultural policies, strengthening research, promoting plant breeding efforts and the expanded use of local adopted crops, varieties and species.²⁵ Farmers' rights are provided for which include the protection of traditional knowledge; the right to equitable share of genetic resources and the right to participate in decision making.²⁶ Of final note are extensive provisions for the multilateral system of access and benefit sharing as between states.²⁷

This treaty was signed by Zambia as a member state of FAO on 4 November 2002. In accordance with Art 26 the treaty is subject to ratification, acceptance or approval. According to Art 28 the treaty comes into force 90 days after deposit of ratification, acceptance or approval. The importance of Art 28 is that a contracting party to the treaty may after deposit of an instrument of ratification, request a member state to provide information as to the implementation of the treaty.

²⁴ Art 4

²⁵ Art 6

²⁶ Art 9

²⁷ PART IV Art 10-13

It would therefore appear that Zambia has not yet implemented certain provisions such as legislation that would ensure full compliance.

3.4 Convention on Biological Diversity (CBD)

The CBD is a UN sponsored agreement that was signed by state parties on 5 June 1992.

The objectives of the convention are contained in Article 1 and are three fold:

- The conservation of biodiversity
- Sustainable use of the components of biodiversity and
- Sharing the benefits arising from the commercial and other utilisation of genetic resources in a fair and equitable way.

The convention is comprehensive in its goals says the FAO²⁸ because it deals with an issue so vital to humanity's future that it stands as a landmark in international law. The convention covers ecosystems, species and genetic resources. It also links traditional conservation to using biological resources economically and sustainably. It sets principles for the fair and equitable sharing of benefits arising from the use of genetic resources. It covers the field of biotechnology and addresses technology development, transfer and bio-safety. Most importantly the convention is legally binding.

Zambia signed the treaty on 11 June 1992 and ratified it on 28 May 1993.

²⁸ Sustaining Life on Earth. How the CBD promotes nature and well being. www.biodiv.org/doc/

3.4.1 The Bio-Safety Protocol

In recent times biotechnology has rapidly gained prominence as a tool used to promote agricultural productivity and improved human nutrition. The FAO comments that “biotechnology is being promoted as a better way to grow crops and produce medicines but that this has raised concerns about potential side effects on human health and the environment including rights to biodiversity”²⁹.

The FAO’s comment is in reference to the practice of modification of plant and animal species known as Living Modified Organisms (LMO) or as more commonly known Genetically Modified Organisms (GMO).

The response to concerns raised on GMO’s resulted in governments negotiating a subsidiary agreement to the CBD meant to address the potential risks posed by cross border trade and accidental release of GMO’s. Hence the Cartagena Protocol on Bio-safety was adopted in January 2000.

The protocol allows governments to indicate whether they are willing or not to accept imports of agricultural commodities that include GMO’s, through a mechanism set up to facilitate the exchange of information on GMO’s called the Bio-safety Clearing House.

Zambia signed the protocol on 27 April 2004 and ratified it on 25 July 2004.

²⁹ Ibid

But what is the relationship between the CBD and the Cartagena Protocol to the right to food. The secretariat of the CBD³⁰ comments that "the contribution of biodiversity to food security and nutrition is very clear. Biodiversity provides the plant, animal and microbial genetic resources for food production... At the ecosystem level biodiversity is important not only in providing what we eat but in helping us to produce what we eat."

The Kuala Lumpur Conference³¹ of the Parties to the CBD in fact noted that there was a linkage between biodiversity, food and nutrition and the need to enhance sustainable use of biodiversity to combat hunger and malnutrition and thereby contribute to target 2 of the goal number 1 of the Millennium Development Goals.

3.5 The African Model Law

Concerned with the misappropriation of their biological resources and traditional knowledge, the Organisation for African Unity (OAU as it was then known) tasked its Scientific Technical and Research Commission (STRC) to find a solution that would lead to the protection of indigenous knowledge on medicinal plants and also study the implication of TRIPS. In 1998 the STRC produced the African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources known as the African Model law. The model law was designed to implement both the convention on Biological Diversity (CBD) and the WTO's TRIPS agreement particularly Art 27(3)b.

³⁰ Statement by the Secretariat of the CBD on the occasion of World Food Day 2004 www.bkofkv.org

³¹ 7th Meeting held on 9 – 20 and 27 February 2004

3.5.1 Farmers and Breeders Rights in the African Model law

The main features of the model law with respect to the protection of farmers rights are firstly, the recognition of farmers rights³² whereby the model law states that "farmers rights are recognised stemming from the enormous contributions that local farming communities, especially their women members, of all regions of the World, particularly those in the centres of the origin or diversity of crops and agro-biodiversity, have made in the conservation, development and sustainable use of plant and animal genetic resources that constitute the basis of breeding for food and agriculture production."

The protection granted to farmers³³ are the protection of their traditional knowledge relevant to plant and animal genetic resources; protection to obtain an equitable share of benefits from such use; protection to participate in decision making including at national level; protection to save, use, exchange and sell farm saved seed/propagating material of farmers varieties; protection to use a new breeders variety protected under this law to develop farmers varieties and protection to collectively save, use, multiply and process farm saved seed for protected varieties.

The second feature of the model law relates to Plant Breeders rights³⁴ which are also protected in respect of a new plant variety and include, the exclusive right to sell the plants or the propagating material inclusive of the right to licence and the exclusive right to produce the propagating material of the plant variety for sale inclusive of the right to licence.

³² Art 24 (1)

³³ Art 26

³⁴ Art 30

An analyst³⁵ comments that the model law is balanced in protecting the rights of farmers without prejudice to the rights of plant breeders and the important role of government for ensuring the good of society. The analyst recommends that the model law be used in preparing and adopting domestic laws on plant varieties in compliance with relevant international obligations. Finally it should be noted that the model law provisions mirror those of the CBD.

The African Model Law provisions are not binding on member states. But, member states have been urged by the OAU to use the model law provisions as a basis for enacting member states own national laws so as to ensure harmonisation of IPR laws across the continent.

The African Model Law provisions have yet to be adopted by Zambia.

3.5.2 The African Model Law on Safety in Biotechnology

This model law was finalised on 4 May 2001 in Addis Ababa in anticipation of the enactment of the Cartagena Protocol on Biosafety (Biosafety protocol). The model law attempts to harmonise existing legislation from a unified African perspective and is designed to protect Africa's biodiversity, environment and health from the risks posed by GMO's.

³⁵ Ambassador Sophie Asimenye Kalinde commenting on Farmers' and Breeders' rights in the African Model Law, *r0.unctad.org/trade* alternatively google search on African model law.

Thus the scope of the law³⁶ applies to the import, export, transit, handling and activities related to the use of GMO's. Hence any person who wishes to import, release or place on the market a GMO product must apply to a competent Authority³⁷ providing the necessary information. Also, the competent Authority is required to ensure that a first import of a GMO into the country is only made after it has given its' approval in writing.³⁸

The law imposes liability for the importation, use, release or placing on the market of GMO's, without authority. Thus a person incurs strict liability for any harm and is required to compensate fully the victim(s). This liability extends to the supplier and includes any clean up costs.³⁹ The offence of importing, release or placing on market without approval a GMO product, is punishable by imprisonment on conviction or a fine or both.⁴⁰

It is evident from a review of the model law that it deals with the concerns on the use of GMO's. It should noted that this is a particular concern in Africa where GMO products are distributed as part of Aid grants from Donors based in the developed countries, in times of food shortages. There are also concerns regarding the global push by the developed countries to have their GMO products accepted and traded by the developing

³⁶ Art 2

³⁷ Art 4

³⁸ Art 6

³⁹ Art 11

⁴⁰ Art 15

African countries. The African model law ensures that the use of GMO's is regulated and also that there is harmonisation of GMO laws across the continent.

The African Model law on Safety in biotechnology provisions are not yet adopted in Zambia. But it is anticipated that the African Model Law provisions will be included in the Bio-Safety Bill to be tabled before parliament towards the end of the year.

3.6 Conclusion

There are a number of IPR treaties and agreements that have set the necessary international legal framework intended to provide for food security which, in turn also help to address the right to food.

My summation of Zambia's status on the various key international instruments referred to above is as follows:

- TRIPS - Signed but a *sui generis* system has not yet been implemented
- UPOV - Not a member
- PGRFA - Full member
- CBD - Full member
- African Model law (Farmers and Breeders Rights) – yet to be adopted
- African Model Law on Safety in Biotechnology – Bill on Bio-safety expected to be presented to Parliament in November 2004.

In my opinion, the most pressing issue that faces Zambia with regards to food security and IPRs, remains the implementation of a legal framework that not only fully implements international instruments on patents but provides for the concerns raised (referred to above) on the negative impact of TRIPS on food security.

Chapter 4

4.0 Impact of IPR's Instruments

In the section we examine the implications of the IPR's instruments reviewed in Chapter 3 on food security and the right to food. We will also review the implication of the human rights instruments referred to in Chapter 2 and their impact on the right to food.

4.1 The GMO debate and protection under the CBD

At the height of a food crisis caused by drought during the 2000/2001 season the government of Zambia officially announced its rejection of the GMO food donated to Zambia as aid. The Chief Government Spokesman Newstead Zimba was quoted as having said "on behalf of Cabinet and as a result of a directive from President Mwanawasa, I would like to inform the nation that we have rejected the GMO food."⁴¹

The President explained his government's position at the World Summit on Sustainable Development where he was quoted as saying that the uncertainty surrounding the safety aspects of GMOs concerned his government and caused it to reject the GMO aid donation.⁴² The government had in the meantime made arrangements for the importation of 12,000 tonnes of non GMO maize to avert the hunger crisis facing the country⁴³.

Since Zambia had already signed the CBD and ratified it much earlier why did its provisions not protect Zambia during the GMO crisis? Two pertinent points provide the

⁴¹ Times of Zambia, 17 August 2002

⁴² The Post, 4 September 2002

⁴³ The Post 10 September 2002

answer to this question. Firstly, Article 8 (g) of CBD requires that a state party manage risks associated with Living Modified Organisms. At that time Zambia had no policy in place although now it has adopted a National Biotechnology and Bio-safety Policy⁴⁴ and is in the process of finalising legislation on Bio-safety⁴⁵. Secondly also at that time, Zambia had not yet signed and ratified the Cartagene Protocol and only did so in 2004. So it could not rely on the provisions of the CBD and its protocol to fully protect itself against the use of GMO's at the time.

4.2 Implications of TRIPS

The growth of agro-biotechnology has brought into sharp focus the fight by the large multinational companies to protect plant breeders' rights. Currently, the provisions in TRIPS specifically Article 27 (3) b make it mandatory for all WTO⁴⁶ member states to provide for the protection for micro-organisms, non-biological and micro-biological processes as well as plant varieties either by patent, or by an effective *sui generis* system as a minimum standard. Whilst there is no uniformity yet on these minimums, patent protection (favoured by the US, EU and the biotechnology industry in general), provides exclusive protection to the owner with no exemptions or privileges to any other party without the permission of the patent holder⁴⁷.

The worry, for many developing countries, with patents on genetic resources of food is that this could potentially raise the cost of seed and agricultural inputs making them

⁴⁴ Adopted by Cabinet in 2003

⁴⁵ Expected to be enacted in November 2004 Parliament's sitting.

⁴⁶ World Trade Organisation – Zambia is a member

⁴⁷ JEM AG Supply v Pioneer Hi-Breed International, 2001 SC of USA 122 S.C.T. 593

unaffordable for small farmers. The higher cost of agricultural input would undermine their ability to purchase seed and produce food which would result in a monopoly control for the patent holder.

This point is well elucidated in a combined NGO⁴⁸ press briefing dated 17 October 2002, released from Geneva, which states that six multinationals' control around 70 per cent of patents held on staple food crops. The briefing was also concerned that the recovery of the cost of investment in research and development would be driven by demands of private profit, and not the local farmers' rights to use, save, exchange and sell seeds. The NGO was of the view that no local investment would take place and that the resultant of the extensive R&D expenditure would be an increase in the cost of seed and inputs.

Clearly, the provisions contained in TRIPS' Art 27(3) b relating to patents will continue to be an impediment to the developing countries in their quest to ensure food security and the right to food until the impasse on how best ensure to implement Article 27 (3) b is resolved.

4.3 UPOV an alternative to Patent Rights?

UPOV is the only existing operational *sui generis* system. According to UPOV, it is favoured by 51 member countries. In fact, UPOV argues that it meets the requirements

⁴⁸ Consisting of Action Aid, Consumers International and Gene Campaign which campaigns for the rejection of UPOV and adoption of own legislation by poor countries www.genecampaign.org

of Article 27 (8) b of TRIPS⁴⁹ but Action Aid⁵⁰ vehemently denies this and says that although UPOV is being pushed as an effective *sui generis* system the TRIPS agreement itself makes no mention of UPOV.

Why then is there so much opposition to UPOV as a suitable plant variety protection system. A detailed article⁵¹ on the implications of UPOV on the developing countries brings out several interesting points as to why UPOV should not be adopted by the developing countries. The highlights of these arguments are summarised below:

- The denial of the farmer's right to sell would not only result in a substantial loss of their income but it would also displace the farming community. Ultimately, this would result in the loss of crop genetic diversity.
- The price of seed of the protected variety would be raised and the farmer would now be dependent on the private companies for their seeds.
- UPOV totally denies farmers right and the right to save seed from the previous harvest which is important in the African food system and agricultural management.
- UPOV does not provide any code of technology transfer so it will not help in the improvement of the economy of LCD's.
- Control over food security will now be in the hands of the multi-national companies since they will control seed production.
- UPOV does not recognise farmers as breeders and therefore there is no provision for the prior informed consent of farmer breeders.

⁴⁹ Ibid Note 22

⁵⁰ Ibid Note 48

⁵¹ Ibid Note 23

The most devastating comment is that UPOV is more suitable for industrialist countries where agriculture is done purely as a commercial activity.

From the arguments presented above it can be surmised that UPOV does not appear to be right instrument for ensuring food security and the right to food in the developed countries. It should be noted that Zambia has yet to become a member to the UPOV convention. Does it mean there are no alternatives? The next and last chapter probes this question further.

4.4 Impact of PGRFA on developing countries

The PGRFA reflects the principles of the CBD in orientation with its focus being on the objective of the promotion of sustainable agriculture and food security. It focuses on farmers' rights without directly addressing patents or plant breeders' rights. It provides a legal framework and provides a link to plant genetic resource conservation. Its main focus remains however on farmers' rights, inclusive of the protection of traditional knowledge. The treaty permits access and benefit sharing as a scheme.

The treaty has been commended⁵² for linking the reservation, use, rights of farmers over resources and knowledge with the IPRS system. It has however, been criticised for not being specific on account of having to balance the interests of the different parties to the treaty, particularly the big private seed companies, and the developed and developing countries.

⁵² Dr Phillippe Cutlet. Study on Food Security and IPR in developing countries, August 2003: Legal Instruments of the FAO.

In essence the PGRFA has covered the concerns of developing countries and is essentially the most acceptable treaty instrument to LCD's in terms of making provision for food security and the right to food. To this extent it can be regarded as progressive in the promotion of food security and the right to food. However the concern is that it does not go all the way in providing complete protection to the developing countries

4.5 The African Model Law and IPR's

After approval by the Heads of State at the meeting held in Ouagadougou, Burkina Faso May – June 1998 of the draft model law, the Ministerial Council of the OAU recommended that the draft law and the convention be used as the basis for national legislation by member African states.

As a law, it has received favourable commentary from several quarters. Action Aid ⁵³ comments that the model law is “a strong and co-ordinated international proposal which offers developing countries a far better alternative to European Legislation by focussing on the need to protect Farmers Rights and food and national security goals of their people.” Commenting on the model law Ambassador Kalinde⁵⁴ notes that the model law was designed to implement both the CBD and the WTO's TRIPS agreement particularly the provisions on protecting plant varieties. He says that as such the model law is an appropriate embodiment of the interests of developing countries and appropriately takes their concerns into account.

⁵³ Ibid Note 20

⁵⁴ Ibid Note 35

Other favourable comments come from a well known academic. Presenting a paper on the OAU Model Law Prof. Ekpere⁵⁵ lists the advantages of the model as:

- Addressing food security by promoting conservation of local diversity and recognising farmer's rights inclusive of seed security.
- Guaranteeing sovereign and inalienable rights in accordance with the CBD which is entrusted to the state to protect.
- Acknowledging community rights in accordance with UN Charter.
- Acknowledging the compliance of community knowledge and technology in accordance with the CBD provisions.
- Providing for access to biological resources.
- Providing for fair and equitable sharing of benefits.

With such ululations and given the food crisis facing the continent, one is at a loss to explain why African countries are not adopting the model law en mass. Full adoption of the African Model Law provisions, would ensure that even the human right provisions of the right to food contained in the UDHR and ICESCR can be fulfilled through the creation of a legal framework for IPR's. Perhaps this is in itself the very reason why African countries are hesitant to adopt the model law, fear of the financial consequences of law suites, since a legal platform would be available for taking action against governments that do not address the food security situation of their nations and the right to food!

⁵⁵ Prof J A Ekpere, who is an a former Executive Secretary to the OAU's STRC who presented a discussion paper on the model law and TRIPS at the Eastern and Southern Multi-stakeholders dialogue on Trade Intellectual Property Rights and Genetic Resources held in Nairobi 30-31 July 2110

Chapter 5

5.0 Conclusion

Having from the outset defined food security and having examined the factors that cause food insecurity we established earlier on that food security is closely inter-linked with the human right to food. We also established that this human right to food is recognised in several international instruments most notably the UDHR. The concern by citizens and NGO's in many developing countries has been how to uphold the human right to food and make government states accountable for it.

The realm of Intellectual Property Rights has increasingly become important in ensuring that there is food security and that consequently the right to food is upheld. The importance of IPR's is that they provide a legal framework that protects investors in the field of agriculture. We have already seen that several treaties and agreements such as TRIPS, UPOV, PRGRFA and the CBD have come into force to protect investors' rights. However, these IPR's have not been without some serious negative implication on food security in developing countries.

In order to fight food insecurity most developing countries have focussed on increasing agricultural output. In Zambia's case this is being done through the PSPR strategy. On the other hand it should be noted that the multi-national companies based in the developed countries, have been looking for ways to expand their business and consequently, these companies have been investing heavily in the agro-biotechnological sector. Further, the primary focus in this sector has been on the development of plant

varieties. To protect the investments that these multi-nationals have ploughed in, especially on R & D on plant varieties, the multi-nationals have sought the enactment of IPR's on a global scale.

Meanwhile, serious misgivings have been raised by the developing countries about the implementation of the agri-related IPR's. The concerns mostly surround the implications of implementing IPR's that protect patents particularly the WTO's TRIPS and its provisions in Article 27 (3) b. There is no dispute that the WTO is heavily influenced by the dictates of the developed countries. Consequently the developing nations regard TRIPS as favouring the rich nations and so puts these developing countries in a position where they can be exploited. In fact the argument that patent protection would result in more foreign direct investment, the promotion of the transfer of technology and promote research and development is hotly contested by African countries as they have not yet seen these benefits.

It is however also clear that Africa cannot be isolated from the global trends and events in trade. If Africa is to trade competitively globally and fight problems of poverty and food security it has to be part of the wider global trade network. It is in this regard that Zambia with the rest of Africa is being forced to consider compliance with TRIPS and in particular Art 27 (3) b. In the same vein if Zambia's PSPR program is to succeed, the TRIPS provisions in Art 27(3) b can no longer be ignored by the government but must be confronted.

There are other concerns about the socio-economic and environmental impacts that would arise from the loss of the local agro-biodiversity and bio-safety. The African reaction, to developments in biological related Intellectual Property rights that require protection to be given to IP owners, has been to issue two African Model Laws.

- The first one protects the Rights of Local Communities, Farmers and Breeders to Biological Resources and regulates their Access.
- The second protects Safety in Biotechnology.

In summary, some of the basic key principals of the (OAU) model law on Farmers and Breeders rights are: *food security* – by promoting conservation of local biodiversity, related technologies innovations and practices as well as community rights over the biological resources and knowledge. The model law acknowledges seed security as the foundation of food security.

Sovereign and inalienable rights – the model law asserts that knowledge, technologies and biological resources of local communities are held in trust for future generations and that there should therefore be no monopoly rights over them.

Participation in decision making – the model law provides for effective participation of affected communities in the regulation of access and sharing of benefits accruing from the utilisation of their biological resources and knowledge.

The basic principles of the model law on Safety in Biotechnology summarised are recognition that scientific knowledge about GMO's is incomplete and therefore the model

law allows countries to take measures to prevent harm to the environment and human health. Consequently the import, transit, contained use, release or placing on the market of a GMO product is strictly controlled in accordance with the requirements of Art 8(g) of the CBD. Thus it provides for a holistic legal framework to achieve this.

But there has been deep reluctance by most African countries to adopt the full provisions of IPR instruments particularly Article 27 (3) b in TRIPS, to comply fully with the CBD provisions of Article 8 (8) and to adopt the African Model law. The issues preventing full implementation have been discussed in detail in the preceding chapters. These issues and concerns can be summarised as follows:

- The cost of food production would go up as a result of the protection given to patent holders.
- There would be consequential loss of income as local farmers' rights to save, use and sell seeds would be lost.
- Loss of control over food security which will effectively be in the hands of multinational companies who will control seed production.
- GMO products are being promoted by the developed countries at the expense of the developing countries.
- There will be no effective growth in agriculture as investment will be made in the developed and not the developing countries.
- The rights of locals to their knowledge and innovation will end up being patented.

Zambia has made an attempt to implement some of these IPR's and is in the process of enacting a Bio-safety bill that should ensure full compliance with the CBD and PRGFA. The TRIPS provisions contained in Article 27 (3) b are still being considered by the Zambian government.

But will these measures assure food security and the right to food? In my opinion the government should not be cajoled and submitted into enacting legislation ensuring full compliance with the WTO's TRIPS and the CBD. The reason to my mind as to why Zambia should not do so is fairly straight forward and obvious, implementation of TRIPS in full will not assure food security. This is because the benefits of investment accrue to the investor and not the country or local community. There is also no mechanism in place to ensure that investment benefits are shared with the community where the investment is taking place. There is additionally no guarantee that the livelihoods of local community including their ability to retain traditional know-how will be safeguarded. This being so, how is food security to be assured by the implementation in full of IPR's relating to patents?

As regards Human Rights, how will implementation of IPR's in full in relation to TRIPS Article 27 (3) b ensure the right to food? Suppose IPR's were to be fully implemented and citizens then decide to take legal action for the government's failure to ensure the right to food, how will the government be able to satisfy this right when presently it is unable to do so due to scarcity of resources? What difference can the implementation of IPR's make to the state's inability to adequately feed its citizens?

In my opinion, the solution to the urgent need for states to be self sufficient in food lies in a different approach to the whole question. Developing countries including Zambia should not succumb to the pressure exerted by the developed countries to comply with the WTO's, TRIPS provisions in full. What could developing countries possibly do to solve the problem of food insecurity? An alternative is for Zambia and the developing nations to negotiate conditions that would ensure fair play and justice in the distribution of food and a state's ability to provide adequate food for its citizens.

I am firmly of the view that the solution to food insecurity does not lie in enactment of laws but a change in the international economic order, such that the new economic structure affords the developing countries equal opportunity and access to the world market. There is general consensus that the present economic order favours the developed countries. Developing this point further, the present supporting international legal framework to the current economic order must also favour the developed countries. Therefore, the starting point is to change the international economic order to an equitable one and then develop an international legal framework inclusive of IPR's which supports the new economic order. Then and only then would the developing countries be said to be providing for food security as they would be able to adequately feed their citizens and thereby also provide for the human right to food. The fight against food insecurity then must proceed along the lines of a new economic order supported by a new legal system inclusive of IPR's which will then also address the related human right to food.