IN QUEST FOR AN EFFICIENT AGRI-FOOD SYSTEM

Reflections on Uganda's Major Agri-Food System Policies and Policy Frameworks

Ronald Naluwairo

ACODE Policy Research Series No. 49, 2011

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ACODE	Advocates Coalition for Development and Environment
AGRA	Alliance for a Green Revolution
AIA	Advance Informed Consent
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BCH	Biosafety Clearing House
CAADP	Comprehensive Africa Agriculture Development Programme
CBD	Convention on Biological Diversity
CESCR	Committee on Economic, Social and Cultural Rights
CGIAR	Consultative Group on International Agricultural Research
CPB	Cartagena Protocol on Biosafety
DISP	Development Strategy and Investment Plan
EAC	East African Community
EAC-ARDP	East African Community Agriculture and Rural Development Policy
EIA	Environmental Impact Assessment
ENR	Environment and Natural Resources
EPRC	Economic Policy Research Centre
GDP	Gross Domestic Product
GGWI	Great Green Wall Initiative
GMOs	Genetically Modified Organisms
ICESCR	International Covenant on Economic, Social and Cultural Rights
IDRC	International Development Research Centre
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
LMOs	Living Modified Organisms
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDGs	Millennium Development Goals
MFPED	Ministry of Finance, Planning and Economic Development
NAADS	National Agricultural Advisory Services
NDP	National Development Plan
NEMPU	National Environment Management Policy for Uganda
NEPAD	New Partnership for Africa's Development
PGRFA	Plant Genetic Resources for Food and Agriculture

PMA	Plan for Modernisation of Agriculture
SLM	Sustainable Land Management
UFNP	Uganda Food and Nutrition Policy
WHO	World Health Organisation
WTO AoA	World Trade Organisation Agreement on Agriculture
WTO	World Trade Organisation

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EXECUTIVE SUMMARY

Despite the several agri-food system policies and policy frameworks put in place to ensure the sustainable use and management of the Environment and Natural Resources (ENR), and increased agricultural production and food security, the state of Uganda's ENR, agriculture and food security remains unsatisfactory. This raises fundamental questions about the nature and effectiveness of these policies and policy frameworks. This paper identifies Uganda's major agri-food system policies and policy frameworks, examines their nexus and assesses their potential to improve agricultural production, food security and sustainable use and management of ENR.

In terms of the broad sectoral policy guidelines, principles and aspirations, the paper establishes that Uganda's major agri-food system policy frameworks are fairly well-linked and coordinated. For instance, the National Environment Management Policy for Uganda (NEMPU), which is Uganda's major environmental policy framework, calls for the enhancement and strengthening of environmental concerns in agricultural research, training and extension. On the otherhand, Uganda's major agricultural sector policy framework i.e., the Plan for Modernisation of Agriculture (PMA), clearly states that considerations will be made to address environmental concerns in the agriculture sector priority programmes such as research, extension, agro-processing and natural resource management. The PMA also commendably includes the ministries responsible for water, land and environment in its implementation framework and calls for effective linkages between Agriculture Advisory Services, Production and Environmental committees at the various levels of local government.

The above conclusion about Uganda's major agri-food system policy frameworks notwithstanding, the specific policies embedded therein and in other-related frameworks are characterised by many inconsistencies. For instance, the rights-based approach to food security advanced by the Uganda Food and Nutrition Policy is inconsistent with the market-based approach to food security espoused by the National Agricultural Advisory Services (NAADS) and the PMA. Also, whereas NEMPU stresses that increased agricultural production should be based on improved farming systems rather than on expansion of agricultural land, the PMA calls for the generation and adoption of technologies that lead to expansion of acreage for agricultural production. These and other policy inconsistencies negatively impact on the ability of Uganda's agri-food system to effectively and efficiently deliver on the objectives of sustainably increasing agricultural production, ensuring food security and sustainable use and management of ENR. The quest for an efficient and effective agri-food system in Uganda should therefore start by addressing the existing policy inconsistencies.

It is also observable that the majority of Uganda's specific agri-food system policies are market-oriented. They are grounded in the neoliberal economic thinking that emphasises limited Government intervention in favour of the market and private sector-led growth and development. This is for instance the case with the country's agricultural research, extension and food security policies. Though important, the private sector and market-based approaches can only succeed in bringing about efficient growth in agricultural production and guaranteeing food security where the sector is well-developed with enough and competent service providers and where farmers and the general citizenry are sufficiently empowered; which is not the case in Uganda. The private sector and market-based approaches can also not be relied upon to deliver certain agri-food system goods and services like those concerned with the conservation and sustainable use of ENR. This calls for Government's continued intervention and investment in the ENR sector.

It is argued that the overemphasis of the market-based approaches to agricultural development in areas like agricultural research and extension, has the potential of marginalising certain crops and animals that may not be considered marketable, yet could be very important for assuring local food security and resilience to climate change.

Regrettably, the paper also notes the absence of any specific policy or policy framework to support the growth and development of the organic agriculture sub-sector. This is notwithstanding the fact that in Uganda's circumstances, organic agriculture remains the most environmentally, socially and economically sustainable farming system. In quest for an efficient agri-food system, Uganda's agri-food system policy architecture needs therefore to also support and promote organic agriculture.

Critical for ensuring food security of all Ugandans, the paper calls for a reconsideration of the country's market-based food security policy approach. It suggests the rights-based approach as the better option.

Finally, the paper identifies a number of areas that require further research to better understand the reasons why Uganda's agri-food system policies and policy frameworks are not performing well in terms of ensuring increased agricultural production, food security and the sustainable use and management of ENR. First, it recommends a study to establish the existence, functionality and level of coordination of all district and grassroot committees and institutional mechanisms provided for in the different agri-food system policy frameworks. Second, it recommends a study to assess the extent to which NAADS is implementing its Natural Resources Strategy which aims to ensure that ENR issues are taken into consideration throughout all its activities. In the light of the Government policy position that environmental concerns will be taken into account in all the agricultural technology generation processes, this paper also recommends a study to assess the extent to which this policy position is put into effect.

1

INTRODUCTION

In the recently adopted Uganda National Development Plan (NDP),[1] Government concedes that the country's food security situation has been unsatisfactory since 1992.[2] According to a recent Action Aid study, millions of Ugandans are classified as either food-insecure, hungry or vulnerable.[3] The Agriculture Sector Development Strategy and Investment Plan (DSIP), states that the number of people who are food-insecure increased from 12 million in 1992 to 17.7 million in 2007.[4] The population increase notwithstanding, this is a very big number of food-insecure people for a small country like Uganda to have. It generally means that more than half of Uganda's population is food-insecure.[5]

The nutrition security of many Ugandans remains worrying. While statistics show improvement in the average caloric intake per person per day (i.e. from 1,494 in 1992 to 1,971 in 2005), the figure is still considerably less than the 2,300 recommended by the World Health Organisation (WHO).[6] The prevalence of malnutrition and undernourishment in Uganda's total population also remains high. According to the 2006 Demographic and Health Survey for instance, the prevalence of stunting among children aged five years and below in Uganda has remained constant at 38 per cent since 1995.[7] Among the major causes of this high rate of malnutrition and stunting include inadequate food intake and poverty.[8]

Uganda's food (in)security situation summarised above is happening in-spite of more than two decades of policy reforms in the ENR, agriculture and food security sectors. Could it be that the various existing agri-food system policies and policy frameworks meant

1 Republic of Uganda (2010), *The National Development Plan 2010/11-2014/15,* Ministry of Finance, Planning and Economic Development, Kampala. The NDP replaced the Poverty Eradication Action Plan (PEAP) as Uganda's overall development planning framework.

2 Ibid, para.243.

3 Curtis, M., (2010), *Invest in Smallholder Farmers: Six Areas of Improvement in Agricultural Financing*, Action Aid, Kampala p.11.

4 Republic of Uganda (2010), *Agriculture for Food and Income Security: Agriculture Sector Development Strategy and Investment Plan*, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, pp. 8 and 50.

5 Uganda's current population is estimated to be thirty three million persons. See UBOS (2011), *Statistical Abstract*, Uganda Bureau of Standards, Kampala.

6 Supra note 4, p.8. For more details about issues surrounding nutritional security in Uganda, see Ssewanyana, S., and Kasirye, I., (2010), *Food Insecurity in Uganda: A Dilemma to Achieving the Hunger Millennium Development Goal*, Economic Policy Research Centre, Kampala.

7 UBOS and Macro International Inc (2007), *Uganda Demographic and Health Survey 2006*, UBOS and Macro International Inc, Calverton, Maryland.

8 Ibid.

to address challenges in these areas are not the correct prescription?? If this is not the case, where is the problem? What needs to be done to promote an efficient agri-food system that will ensure sustainable increased agricultural production and food security while maintaining the integrity of the environment? These are some of the questions that this policy research paper addresses.

The paper has three specific objectives. First, it seeks to examine the nexus between and among Uganda's ENR, agriculture and food security policy frameworks. Second, it seeks to identify and examine Uganda's specific agri-food system policies especially with regard to their potential to ensure increased agricultural production, food security and sustainable use and management of ENR. Finally, the paper provides some recommendations for improving the potential of Uganda's agri-food system policies to improve agricultural production, food security and sustainable use and management of ENR.

The paper is largely based on a desk review of the relevant policy frameworks and literature. It is meant to be a multi-purpose reference document on Uganda's major agri-food system policies and policy frameworks. It is expected not only to raise awareness about Uganda's food and agricultural policies, but also to inform and stimulate debate about the reforms required to create a robust agri-food system in the country.

The paper consists of eight sections. Section 2 provides the background to this study. Section 3 is a brief about the concept of agri-food system and agri-food system policies. Section 4 gives a brief over-view of the global and regional policy context in which Uganda's agri-food system policies should be understood. In Sections 5 and 6, we explore the constitutional foundation of Uganda's agri-food system policies and nexus between and among their mother policy frameworks respectively. The review of Uganda's specific agri-food system policies follows in Section 7. Section 8 is the conclusion of the paper.

2

BACKGROUND

Over the last two and a half decades, Uganda has invested heavily in developing and implementing different agri-food system policies, plans and strategies in an attempt to transform its agricultural sector and ensure food security for its populace. In the last decade alone, it formulated and adopted over ten policy frameworks and plans relevant to the country's agri-food system. Despite these policy efforts, the performance of Uganda's agriculture sector and the country's general food security situation remain unsatisfactory. Although the country has generally enjoyed good economic growth in the last ten years, averaging 7 per cent,[9] the growth in the agriculture sector (the sector which is most vital for food production and poverty reduction) has been disappointing. Real growth in agricultural output declined from 7.9 per cent in 2000/01[10] to 0.9 in 2010/11.[11] In fact, as Table 1 below shows, in some years, sub-sectors like the food crops have been registering negative growth. The poor performance of the agriculture sector is also reflected in the sector's declining contribution to the country's Gross Domestic Product (GDP). The contribution of the agriculture sector to GDP declined from 39.9 per cent in 2001/02 to 23.7 per cent in 2008/09.[12] Table 1 below summarises Uganda's major productive sectors' growth rates and shares in GDP for the years 2003/04 to 2010/11.

Table 1: Sectoral GDP (2002 Prices) Growth Rates and Shares in GDP

Sector	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
Sector and subsector growth rates								
Agriculture	1.6	2	0.5	0.1	1.3	2.9	2.4	0.9
Cash crops	7.3	-5.5	-10.6	5.4	9.0	1.7	-1.1	-15.8
Food crops	-1.5	-0.2	-0.1	-0.9	2.4	2.9	2.7	2.7
Live stock	4.7	3.0	1.6	3.0	3.0	3.0	3.0	3.0
Fisheries	9.6	13.5	5.6	-3.0	-11.8	-0.4	2.6	2.6

9 See the Foreword to the NDP, supra note 1.

10 NDP, supra note 1, para. 242

11 MFPED (2011), *The Background to the Budget 2011/12 Fiscal Year*, Ministry of Finance, Planning and Economic Development, Kampala, p.15.

12 MFPED, Background to the Budget (various years).

Industry	8	11.6	14.7	9.6	9.1	3.8	6.5	7.5
Services	7.9	6.2	12.2	8.0	10.2	9.4	7.4	8.0
Sector shares in total GDP at current prices								
Agriculture	23.8	25.1	24.1	22.3	21.2	23.7	23.8	22.5
Industry	22.9	23.5	22.8	25.1	25.6	24.2	24.9	25.4
Services	47.4	45.4	47.2	47.0	47.3	46.4	45.3	46.2

Source: NDP 2010/11-2014/15, MFPED (2011) and MAAIF (2011)

As can be seen from Table 1 above, the contribution of the agriculture sector to GDP is very low; especially given the fact that up-to now, the sector still employs the majority of Uganda's labour force. In 2009/10, the agriculture sector employed 66 per cent of the total working population.[13] Government's argument that the consistent decline in the share of the agriculture sector as a percentage of GDP is indicative of a transforming economy is highly contestable especially given the fact that the growth in both the services and industry sectors has been relatively constant as shown in the table. Considering that over 73 per cent of all households and the majority of the poor in Uganda depend directly on agriculture for their livelihood,[14] the dismal growth registered in the sector in the last decade is very worrying not only in terms of ensuring household and national food security, but also poverty reduction.

The poor performance of the agriculture sector is, moreover, taking place at a time when the country's population is growing at a very high rate. It is estimated that since 2002, Uganda's population has been growing at an average rate of 3.2 per cent per annum.[15] With this population growth, Uganda has the third highest rate of population increase in the world.[16] It is projected that at this rate, Uganda's population will increase from the current estimated 33 million people to 37.9 million persons in 2015.[17] What

> What these statistics mean is that unless serious interventions are made, Uganda may cease to be self-sufficient in food production, as the country's food production would not keep pace with the rapid population growth. In fact, by 1997, the per capita food production in Uganda had already reduced to 44 per cent less than what it was in 1970

13 UBOS (2011), supra note 5.

14 Supra note 4, p.8.

15 NDP, supra note 1, para. 497.

16 Supra note 4, p.17.

17 Supra note 15.

these statistics mean is that unless serious interventions are made, Uganda may cease to be self-sufficient in food production, as the country's food production would not keep pace with the rapid population growth. In fact, Bahiigwa points out that in 1997, the per capita food production in Uganda had already reduced to 44 per cent less than what it was in 1970.[18] Given the high population growth, and the very poor performance of the food crop sub-sector as heighted in Table 1, the situation has most likely worsened by now. Yet many Ugandans, especially those that depend on agriculture for livelihood security, are still too poor to meet their food requirements through the market. While many countries in the world are making significant progress towards poverty alleviation, the progress in Uganda has generally been slow. In 2009/10, nearly 7.5 million Ugandans were still classified as poor.[19]

The challenge of declining agricultural production and high population growth is compounded by environmental degradation and unsustainable use of natural resources. Environmental degradation takes many forms including agricultural-driven encroachments, soil erosion, water pollution, water logging, deforestation and encroachment on ecologically-sensitive environs like swamps, wetlands and protected areas.[20] The annual cost of environmental degradation is very high.[21] Soil loss and degradation costs the country most. In 2003, for instance, the annual cost of soil nutrient loss primarily due to soil erosion was estimated at about $ 625 million per year.[22] All these factors have combined to undermine agricultural production, household and national food security.

Given the situation described above, unless serious and well thought out interventions are made, the performance of the agriculture sector will continue to decline and the country's food security situation will worsen. Uganda would also not be able to meet certain development targets and commitments agreed to internationally, regionally and nationally. For instance, at the international level, both at the 1996 World Food Summit and under the Millennium Development Goals (MDGs) set in 2000, Uganda committed to reduce by half the proportion of people living on less than one dollar a day and the proportion of people who suffer from hunger by 2015. At the Africa regional level, under the Comprehensive Africa Agriculture Development Programme (CAADP) compact,

> As of 2008, ten African countries had already met the CAADP target of raising agricultural productivity by at least 6 per cent by 2015, yet less than three years to the agreed time frame, Uganda is not yet even half-way to meeting the said target.

18 Bahiigwa, G., (1997), *Household Food Security in Uganda: An Empirical Analysis*, Economic Policy Research Centre, Kampala.

19 UBOS (2011), supra note 5.

20 See NEMA, State of Environment Reports for various years.

21 NAADS (2003), *NAADS Natural Resources Strategy*, National Agricultural Advisory Services Secretariat, Kampala, p.5.

22 Supra note 4, p.37.

Uganda, together with other African countries, agreed to take steps that would raise agricultural productivity by at least 6 per cent by 2015.[23] It is instructive to point out that as of 2008, ten African countries including Angola, Malawi, Namibia and Mozambique had already met the CAADP target,[24] yet less than three years to 2015, Uganda is not even half-way to meeting the said target. As indicated in Table 1, Uganda's agriculture sector growth for the year 2010/11 was 0.9 per cent.

It is against this background that a review of Uganda's major agri-food system policies and policy frameworks becomes important to ascertain the gaps/loopholes that could be affecting their effectiveness in ensuring sustainable use and management of ENR, increased agricultural production and food security.

23 For more details about CAADP, see infra, Section 4.2.

24 See Babatunde, O., (2010), Monitoring and Evaluation Report for CAADP, Available at http://www.caadp.net/pdf/Comprehensive%20Monitoring%20and%20Evaluation%20(M&E)%20Report%20CAADP.pdf [Accessed on 20 January 2011].

3

ABOUT AGRI-FOOD SYSTEMS AND AGRI-FOOD SYSTEM POLICIES

"Agri-food system" is a very broad and multi-faceted concept. It comprises a range of actors, relationships and set of activities involved in the production, processing, packaging, distribution, retailing, consumption and recycling of food.[25] With respect to the major actors, it includes all actors that participate and benefit from the above-mentioned activities and processes.[26] These include not only the farmers and farm workers who produce the food and fibre, but also extension workers, manufacturers and suppliers of agricultural inputs, agricultural researchers and technology developers, food processors, packagers, distributors, marketers, consumers, regulatory bodies and policy makers. Agri-food system policies, therefore, include a range of public policies governing the different aspects of the entire agri-food system chain, i.e., from food and agricultural production (which includes ENR aspects) to consumption and recycling of food. This paper is, however, only concerned with the major policies and policy frameworks governing ENR, agriculture and food security.

The major objective of any agri-food system is to ensure food security. Other objectives include ensuring: efficient growth in the food and agricultural sectors; improved incomes and income distribution; and satisfactory nutritional status for the entire population through provision of a minimum subsistence floor.[27] Additionally, any robust agri-food system should strive to ensure sustainable use and management of ENR. This is particularly because, ENR provide the basis for food and agriculture production. In reviewing Uganda's major agri-food system

Box 1: Major Objectives of a Robust Agri-Food System

- Ensure efficient growth in the food and agricultural sectors;
- Ensure satisfactory nutritional status for the entire population;
- Ensure sustainable use and management of ENR; and
- Improve incomes and income distribution.

25 See Fine, B., (1998), *The Political Economy of Diet, Health and Food Policy*, Routledge, London. See also Pimbert, M., et al (2001), *Global Restructuring, Agri-Food Systems and Livelihoods*, International Institute for Environment and Development, London, p.4.

26 Pimbert, M., (2009), *Towards Food Sovereignty: Reclaiming autonomous food systems*, International Institute for Environment and Development, London.

27 Timmer, P., etal (1983), *Food Policy Analysis*. The World Bank.

policies and policy frameworks, it is, therefore, important to reflect on the extent to which they aim to achieve these objectives.

In general, the Government of Uganda conceeds that Uganda's agri-food system is weak, characterised with weak value chain linkages,[28] few agro-processing industries, uncoordinated institutions,[29] policy inconsistencies,[30] weak standards,[31] poor enforcement of laws and regulations, and poor and inadequate physical infrastructure.[32]

28 NDP, supra note 1, Section 5.2.1.

29 Ibid.

30 Some of these policy inconsistencies are highlighted in Section 6.1 of this paper

31 Supra note 28.

32 Ibid.

4

INTERNATIONAL AND REGIONAL POLICY CONTEXT

Uganda's major policies and policy frameworks governing ENR, agriculture and food security must be understood within the global and regional policy discourse on agri-food systems. Before reviewing Uganda's major ENR, agriculture and food security policies and policy frameworks, it is therefore important to first give a snap-shot of the major global and regional policy instruments and initiatives impacting on these national policies and strategies. While it is recognised that there are many international and regional instruments and initiatives with a bearing on ENR, agriculture and food security issues, the overview in this section is confined to only those that are most relevant to the subject.

4.1. The Global Policy Discourse on Agri-Food Systems

The global discourse on agri-food systems is largely centred on the international agreements dealing with ENR issues on one hand, and agriculture and food security issues on the other. Regarding the former, the most important international agreements are the Convention on Biological Diversity (CBD)[33] and the Cartagena Protocol on Biosafety (CPB).[34] With respect to the latter, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA),[35] the World Trade Organisation (WTO) Agreement on Agriculture (AoA)[36] and the International Covenant on Economic, Social and Cultural Rights (ICESCR)[37] constitute the most important international instruments.

Starting with the international agreements dealing with ENR issues, the CBD as the principal instrument in this area is mainly concerned with the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.[38] It is also concerned with issues

33 Convention on Biological Diversity, Nairobi, 1992. Uganda signed the CBD on 8 June 1992. It ratified it on 8 September 1993.

34 Cartagena Protocol on Biosafety, Cartagena, 2000. Uganda signed the CPB on 24 May 2000. It ratified it on 30 November 2001.

35 The International Treaty on Plant Genetic Resources for Food and Agriculture, Rome, 2001. Uganda acceded to the ITPGRFA on 25 March 2003.

36 Uganda has been a member of the WTO since its founding in 1995.

37 International Covenant on Economic, Social and Cultural Rights, 1966. Uganda acceded to the ICESCR on 21 June, 1995.

38 Supra note 33, Article 1.

of access to genetic resources and the appropriate transfer of relevant technologies.[39] The CBD is premised on the major principle of the sovereign right of states to exploit their own resources pursuant to their own environmental policies, and their responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.[40]

As an international framework instrument, the CBD provides general principles and measures for the conservation and sustainable use of biological diversity and the fair and equitable sharing of benefits arising from utilisation of genetic resources. These principles and measures generally deal with issues of protection of biological diversity *in situ* and *ex situ*; impact assessment and minimising adverse impacts on biological diversity; access to genetic resources; access to and transfer of technology; exchange of information, technological and scientific cooperation; research and training; and incentive measures for the conservation and sustainable use of biological diversity, *inter alia*.

In accordance with the general principles and measures laid out in the CBD, each contracting party is obligated to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt existing strategies, plans or programmes to reflect, *inter alia*, the measures set out in the CBD.[41] Contracting parties are also obligated to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.[42]

The CPB as the other major international instrument dealing with environmental issues is a supplementary agreement to the CBD. It reaffirms the precautionary approach contained in principle 15 of the Rio Declaration on Environment and Development and states its objective as "to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on trans-boundary movement."[43] The major objective of the CPB is, therefore, to protect the environment and human health from the possible adverse effects of modern biotechnology.

The CPB establishes rules and procedures that are deemed important for ensuring the safe transfer, handling and use of Living Modified Organisms (LMOs). Among these rules and procedures are those requiring and governing Advance Informed Agreement (AIA) before the first shipment of a LMO intended to be introduced in the environment;[44]

39 Ibid.

40 Ibid, Article 3.

41 Ibid, Article 6 (a).

42 Ibid, Article 6 (b).

43 Supra note 34, Article 1.

44 Ibid, Articles 7-10 and 12.

risk assessment and management;[45] and those dealing with the handling, transport, packaging and identification of LMOs.[46] As is the case with the majority of international agreements, the CPB explicitly requires each Party to take necessary and appropriate legal, administrative and other measures to fulfil their obligations under the Protocol.[47] To assist the Parties in its effective implementation, the CPB establishes a Biosafety Clearing-House (BCH) mechanism to facilitate the exchange of scientific, technical, environmental and other relevant information on, and experience with LMOs.[48]

The ITPGRFA as the major international agreement on issues of agriculture and food security was adopted in 2001, with the major objective of ensuring sustainable agriculture and guaranteeing food security through the conservation and sustainable use of Plant Genetic Resources for Food and Agriculture (PGRFA) and the fair and equitable sharing of the benefits arising out of their use.[49] It provides general measures for the conservation and sustainable use of PGRFA[50] as summarised in Box 2 and requires Contracting Parties to integrate them in their agriculture and rural development policies and programmes. [51]

Box 2: General Measures for the Conservation and Sustainable Use of PGRFA (Articles 5 & 6 of the ITPGRFA)

a) Survey and inventory PGRFA taking into account the status and degree of variation in existing populations;
b) Promote the collection of PGRFA and relevant associated information on those PGRFA that are under threat or are of potential use;
c) Promote and support farmers and local communities' efforts to manage and conserve on-farm their PGRFA;
d) Promote in situ conservation of wild crop relatives and wild plants for food production, including in protected areas, by supporting, inter alia, the efforts of indigenous and local communities;
e) Promote the development of an efficient and sustainable system of *ex situ* conservation, giving due attention to the need for adequate documentation, characterization, regeneration and evaluation;
f) Monitor the maintenance of the viability, degree of variation, and the genetic integrity of collections of PGRFA;
g) Take steps to minimize or, if possible, eliminate threats to PGRFA;
h) Pursue fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;
i) Strengthen research which enhances and conserves biological diversity;
j) Promote plant breeding efforts which, with the participation of farmers, strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions;
k) Broaden the genetic base of crops and increase the range of genetic diversity available to farmers;
l) Promote the expanded use of local and locally adapted crops, varieties and underutilized species; and
m) Support the wider use of diversity of varieties and species in on-farm

The ITPGRFA further recognises the enormous contribution that farmers have made and will continue to make for the conservation and development of PGRFA which constitute the basis of food and agricultural production throughout the world.[52] It thus provides for and recognises farmers' rights as one of the key measures for ensuring continuation of their efforts in conserving, improving and making available PGRFA.[53] The responsibility for realising farmers' rights is placed on national governments to determine in accordance with their

45 Ibid, Articles 15 and 16 respectively.

46 Ibid, Article 18.

47 Ibid, Article 2 (1).

48 Ibid, Article 20. For a detailed explanation of the CPB, see Mackenzie, R., et al (2003), *An Explanatory Guide to the Cartagena Protocol on Biosafety*, IUCN, Gland.

49 Supra note 35, Article 1.

50 Ibid, Articles 5 and 6.

51 Ibid, Article 7.

52 Ibid, Article 9(1).

53 Ibid, Article 9.

national needs and priorities.[54] Among the key measures provided to realise and promote farmers' rights include: the right of farmers to save, use, exchange and sell farm-saved seed/propagating materials; the protection of traditional knowledge relevant to PGRFA; the right to equitably participate in sharing benefits arising from the utilization of PGRFA; and the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA.[55]

Another key feature of the ITPGRFA, in as far as ensuring sustainable agriculture and food security is concerned, is that it establishes a global multilateral system of access and benefit sharing to facilitate access to certain PGRFA (listed in its Annex I), and to share, in a fair and equitable way, the benefits arising out of their utilization.[56] Annex 1 PGRFA include important food crops such as beans, potatoes, cassava and bananas. The list of these crops and forages was established according to the criteria of food security and interdependence.[57] The system only applies to PGRFA covered in Annex I which are under the management and control of the contracting parties and in public domain.[58] It also covers PGRFA listed in Annex I and held in the *ex situ* collections of the International Agricultural Research Centres of the Consultative Group on International Agricultural Research (CGIAR).[59] The multilateral system of access and benefit sharing presents enormous opportunities for Uganda and other ITPGRFA Contracting Parties to access important germplasm that can be used to improve agricultural production and food security.[60]

Concerning the ICESCR as another major international instrument dealing with issues of agriculture and food security, member states recognise the right to adequate food for everyone and agree to take appropriate steps to ensure its realisation.[61] They also recognise the fundamental right of everyone to be free from hunger.[62] In this regard, the ICESCR obligates member states to, individually and through international co-operation, take measures and programmes to improve methods of production, conservation and distribution of food; and to ensure an equitable distribution of world food supplies in relation to need.[63] According to the Committee on Economic, Social and Cultural Rights (CESCR), the United Nations body charged with the responsibility of overseeing the implementation and interpreting of the ICESCR:

54 Ibid, Article 9 (2).

55 Ibid.

56 See generally part IV of the Treaty.

57 Article 11 (1).

58 Article 11 (2).

59 Article 11 (5).

60 For a detailed explanation of the history and provisions of the ITPGRFA, see Moore, G., and Tymowski, W., (2005), *Explanatory Guide to the International Treaty on Plant Genetic Resources for Food and Agriculture*, IUCN, Gland.

61 Supra note 37, Article 11 (1).

62 Ibid, Article 11 (2).

63 Ibid.

> The right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement.[64]

It is apparent from this definition that the right to adequate food has two major aspects. First, it requires availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture.[65] Second, accessibility of food must be in ways that are sustainable and which do not interfere with the enjoyment of other human rights.[66]

The primary obligation of states with respect to the right to food entails taking steps to progressively achieve the full realisation of the right to food so that everyone under its jurisdiction has access to the minimum essential food which is sufficient, nutritionally adequate and safe, and to ensure their freedom from hunger.[67] Like with all other human rights, the right to adequate food imposes three levels of obligations on member states. These are: the obligation to respect; the obligation to protect and the obligation to fulfil.[68] These state obligations with respect to the right to adequate food are well expounded by the CESCR thus:

> . . . The obligations to respect, as existing access to adequate food requires that state parties do not take any measure resulting in preventing such access. The obligation to protect requires measures by the state to ensure that enterprises or individuals do not deprive [other] individuals of their access to adequate food. The obligation to fulfil (facilitate) means that states must pro-actively engage in activities with the intention to strengthen people's access to, and utilisation of, resources and means to ensure their livelihood, including food security. Finally, whenever an individual or group is unable to enjoy the right to adequate food by the means at their disposal, states have the obligation to fulfil (provide) that right directly.[69]

The CESCR rightly points out that the States' obligation concerning the right to adequate food requires the adoption of a national strategy to ensure food and nutrition security for all, based on human rights principles that define the objectives, and the formulation of policies and corresponding benchmarks.[70] Critical for national policy, the CESCR further stresses that such a strategy should address critical issues and measures with regard to all aspects of the food system, including the production, processing, distribution,

64 Committee on Economic, Social and Cultural Rights (1999), The Right to Adequate Food, General Comment 12, para.6.

65 Ibid, para.9

66 Ibid.

67 Ibid, para.14

68 Ibid, para.15.

69 Ibid.

70 Ibid, para.21.

marketing and consumption of safe food, as well as parallel measures in the fields of health, education, employment and social security.[71]

The WTO AoA as another important international agreement bearing on issues of agriculture and food security was negotiated in the 1986-1994 Uruguay Round multilateral trade negotiations that led to the establishment of the WTO. During these negotiations, states agreed to create, *inter alia*, multilateral trade rules for the liberalisation of agricultural goods. These rules are what are embodied in the WTO AoA. The major aim of the WTO AoA is to make policies governing agricultural trade more market-oriented. It allows governments to support their rural economies but preferably through policies that cause less trade distortion.[72]

Box 3: The Millennium Development Goals

The MDGs generally and particularly MDG 1 on reducing absolute poverty and hunger and MDG 7 on environmental sustainability are important for developing and/or refocusing of national policies, plans and strategies to achieve the set targets which are crucial in ensuring sustainable agriculture and food security. For MDG 1, the set target is to reduce by half the proportion of people living on less than one dollar a day and the proportion of people who suffer from hunger by 2015. For MDG 7, the major targets are to integrate the principles of sustainable development into country policies and programmes; reversing loss of environmental resources; and reducing biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.

The WTO AoA has three main pillars: market access, domestic support and export subsidies. With respect to market access, the agreement replaces non-tariff border measures such as quotas, minimum import prices, discretionary licensing, etc, with tariffs. The agreement provides that members shall not maintain, resort or revert to any measure that restricts foreign producers' access to domestic market and denying consumers access to agricultural commodities at lower world market prices. With regard to domestic support, member countries are required to reduce their domestic support policies that have distorting effects on trade, especially those that provide farmer incentives to produce substantially more of a particular commodity than they would without such policies. Concerning export subsidies, the contracting parties are prohibited from subsidising exports except as provided for under the Agreement.

Overall, many studies have rightly established that the implementation of policy measures based on the WTO AoA in developing countries undermines food security and the potential of agriculture as an engine of economic growth.[73] For this reason, many analysts

71 Ibid, para. 25.

72 See Article 6.

73 See for instance, Murphy, S., (2001), *Food Security and the WTO*, CIDSE Position Paper. See also Barker, D., WTO Agreement on Agriculture: Threat to Food Security and Sustainability. Available at http://www.ifg.org/pdf/cancun/issues-foodsecurity.pdf. (Accessed on 30 June 2011). For the implications of the WTO Agreement on Agriculture and food security in Uganda, see Mugyenyi, O. (2006), The Implications of the WTO Agreement on Agriculture and Trade Liberalisation for Food security in Uganda. Dissertation submitted for the award of Master

have called for a review of the WTO AoA to create exemptions for developing and least developed countries in the interest of developing their agriculture sectors and ensuring food security. Others have actually called for the complete removal of agriculture from the WTO arrangements.

4.2. The Africa Regional Policy Discourse on Agri-Food Systems

At the African regional level, the Comprehensive Africa Agriculture Development Programme (CAADP) of the New Partnership of Africa's Development (NEPAD)[74] is currently the most important and comprehensive initiative aimed at improving agricultural productivity and food security on the continent.[75] The major objective of CAADP is to help African countries reach a higher path of economic growth through agriculture-led development. The African Union's vision for Africa's agriculture articulated in the CAADP compact is agricultural production growing at an annual rate of 6 per cent. To achieve this vision, CAADP focuses on four mutually reinforcing pillars on which to base policy action for the improvement of Africa's agriculture and food security. The four pillars are: land and water management; market access; food supply and hunger; and agricultural research.

The major objective of pillar 1 is to extend the area under Sustainable Land Management (SLM) and reliable water control systems mainly through capacity building, strengthening of the enabling environment, mainstreaming SLM and water strategies within country-driven programmes and scaling up successful technologies and approaches.[76] The major objective of Pillar II (i.e. market access) is to accelerate growth in the agriculture sector by raising the capacities of private entrepreneurs, including commercial and smallholder farmers to meet the increasingly complex requirements of domestic, regional and international markets. In this respect, the Pillar II framework document focuses on four major areas where action is needed to achieve the aforementioned objective, namely: policy and regulatory actions; infrastructure development; capacity building; partnerships and alliances.[77]

Pillar III mainly focuses on options needed to overcome challenges of inadequate food supply, widespread and persistent hunger and malnutrition, and the poor management of food crises. The CAADP Framework for African Food Security (FAFS) which is the Pillar III main framework document therefore provides principles, strategies, actions,

of Laws degree of Makerere University.

74 NEPAD is an implementing agency of the African Union and is responsible for driving economic integration in Africa. NEPAD's four primary objectives are: to eradicate poverty, promote sustainable growth and development, integrate Africa in the world economy, and accelerate the empowerment of women.

75 Other important initiatives include the Alliance for a Green Revolution (AGRA), the Great Green Wall Initiative (GGWI) and the NEPAD Action Plan of the Environment Initiative.

76 For more details about CAADP Pillar I, see NEPAD (2009), Sustainable Land and Water Management: The CAADP Pillar I Framework.

77 For more details about CAADP Pillar II, see NEPAD (2009), Framework for Improving Rural Infrastructure and Trade Related Capacities for Market Access.

and tools to guide national and regional policies, strategies, investments and advocacy efforts necessary for ensuring increased food supply, reduced hunger and malnutrition, and improved food security risk management. In terms of increasing food supply, it gives options for doing this through increased production and improved market linkages. With respect to reducing hunger and malnutrition, it gives options for improving the quality of diets through diversification of food, and options for increasing the incomes of the vulnerable. Regarding improvement of food security risk management, it gives options for improving risk management, options for improving emergency responses, and options for strengthening risk management policies and institutions.[78]

Finally, CAADP Pillar IV aims at improving agricultural research and systems in order to disseminate appropriate new technologies. Its framework document lays out practical actions needed to achieve this objective. Among the actions given include: actions aimed at empowering end-users of agricultural research to ensure their meaningful participation in setting priorities and work programmes for research, extension and training; and actions for improving agricultural extension services including contracting out extension services and mechanisms ensuring that extension costs are shared with local governments and farmers' associations. Other measures include ensuring that the costs of public agricultural research programmes are shared between national and local governments, as well as with farmers' associations; actions for agricultural training and education; and actions for increasing investments in agriculture at the continental, sub-regional and national levels.[79]

To achieve its vision for reviving agriculture in Africa, CAADP set the following specific targets for achievement by the year 2015: improving the productivity of agriculture to attain an average annual growth rate of 6 per cent (with particular attention to small-scale farmers, especially focusing on women); having dynamic agricultural markets within countries and between regions; having farmers integrated into the market economy and having improved access to markets to become a net exporter of agricultural products; achieving a more equitable distribution of wealth; becoming a strategic player in agricultural science and technology development; practising environmentally sound production methods; and having a culture of sustainable management of the natural resource base.

It was realised that to achieve the above-mentioned targets and CAADP's vision, increased investments in the agriculture sector, especially along the four CAADP pillars, was a must. Thus, the Maputo Declaration for CAADP commits African countries to increase public investment in agriculture to at least 10 per cent of their national budgets. While a number of countries have made substantial progress in achieving the CAADP targets,[80]

78 For more details about CAADP Pillar III, see NEPAD (2009), CAADP Pillar III: Framework for African Food Security.

79 For more details about CAADP Pillar IV, see NEPAD (2009), Implementing the Framework For African Agricultural Productivity: An Operational Guide for Practitioners.

80 See Babatunde (2010), supra note 24.

Uganda still has a long way to go. Table 2 below provides the sectoral budget allocations to the agriculture sector over the last eleven years.

Table 2: Agriculture Sector's Share of the National Budget FYs 2001/2-2011/12

2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12
5.1%	4.8%	3.2%	3.4%	4.0%	3.6%	4.3	3.8%	4.4%	5%	4.5%

Source: MFPED (2011) and Lukwago (2010)

As indicated in Table 2 above, in the 2011/12 fiscal year, the agriculture sector was allocated 4.5 per cent of the national budget.[81] This is not even half of CAADP's 10 per cent target. This poor financing of the agriculture sector in Uganda partly explains why its performance remains poor. As indicated in Table 1, in 2010/11, the overall agriculture sector growth was 0.9 per cent. This is not even a quarter of the CAADP target of 6 per cent.

4.3. Policy Initiatives at the East African Community Level

The past decade witnessed the revival of the East African Community (EAC) as the major avenue for deepening co-operation and promoting national and regional development between and among countries in the East Africa region. At the EAC level, the treaty establishing the EAC is the major regional agreement with a bearing on national agri-food system policies and strategies.[82] According to this treaty, the major objective of EAC is to develop policies and programmes aimed at widening and deepening co-operation among the Partner States in different areas for mutual benefit.[83]

Among the key areas of co-operation by EAC partner states are Agriculture and Food Security,[84] as well as Environment and Natural Resources Management.[85] The major objectives of co-operation between and among the EAC partner states in the area of ENR Management are: to preserve, protect and enhance the quality of the environment; to contribute towards sustainability of the environment; to ensure sustainable utilisation of natural resources such as lakes, wetlands, forests and other aquatic and terrestrial ecosystems; and to jointly develop and adopt water resources conservation and management policies that ensure sustenance and preservation of ecosystems.[86] The EAC partner states undertook to: take concerted efforts to foster co-operation in the joint and efficient management and sustainable utilisation of natural resources within the

81 MFPED (2011), supra note 11, p.101.

82 The Treaty establishing the EAC was signed on 30 November 1999 in Arusha, Tanzania.

83 See Article 5 (1).

84 See Chapter Eighteen of the EAC Treaty.

85 See Chapter Nineteen of the EAC Treaty.

86 Article 111 (2) of the EAC Treaty.

Community; co-ordinate their policies and actions for the protection and conservation of the natural resources and environment against all forms of degradation and pollution arising from developmental activities; and co-operate and adopt common policies for control of trans-boundary movement of toxic and hazardous waste.[87] They also agreed to provide prior and timely notification and relevant information to each other on natural and human activities that may or are likely to have significant trans-boundary environmental impacts and to develop and promote capacity building programmes for sustainable management of natural resources.[88]

The overall objectives of co-operation in the agriculture sector are the achievement of food security and rational agricultural production within the Community.[89] To this end, EAC member countries agreed to adopt a scheme for the rationalisation of agricultural production with a view to promoting complementarity and specialisation in and the sustainability of national agricultural programmes in order to ensure a common agricultural policy; food sufficiency within the Community; an increase in the production of crops, livestock, fisheries and forest products for domestic consumption, exports, and as inputs to agro-based industries within the Community; and post-harvest preservation, conservation and improved food processing.[90]

Box 4: Specific Areas of Co-operation in the Agriculture Sector (Article 105.2 of the EAC Treaty)

(a) the harmonisation of agricultural policies of the Partner States;
(b) the development of food security through the production and supply of foodstuffs;
(c) agro-meteorology and climatology to promote the development of early
climatological warning systems within the Community;
(d) the development and application of agricultural training and research
and extension services;
(e) the adoption of internationally accepted quality standards for food
processing;
(f) the establishment of joint programmes for the control of animal and
plant diseases and pests;
(g) the marketing of food and the co-ordination of the export and import of agricultural commodities; and
(h) joint actions in combating drought and desertification ;

With respect to the particular issue of food security, under Article 10 of the treaty establishing the EAC partner states committed to: establish a mechanism for exchange of information on food demand and supply, surpluses and deficits, and food nutrition; harmonise the quality and standards of inputs and products including food additives; develop modalities to have timely information on market prices; harmonise food supply, nutrition and food security policies and strategies; initiate and maintain strategic food reserves; and develop marine and inland acquaculture and fish farming.

In 2006, EAC adopted the East African Community Agriculture and Rural Development Policy (EAC-ARDP) as one of the major steps towards implementation of the EAC Treaty

87 Ibid, Article 111(1).
88 Ibid.
89 Ibid Article 105 (1).
90 Ibid.

provisions regarding co-operation in the field of Agriculture and Food Security. The major goal of EAC-ARDP, which is also the major goal of cooperation of East African Countries in the field of agriculture, is the improvement of the overall wellbeing of the people whose principal occupation and way of life is based on agriculture and its derivatives.[91] The overarching objectives of EAC-ARDP are the achievement of food security and rational agricultural production.[92] EAC-ARDP has 14 main focus areas where intervention is needed to achieve the EAC's vision for agriculture and food security. These focus areas and EAC's main objectives in those areas are summarised in Table 3 below.

Table 3: Focus Areas and Objectives of the EAC-ARDP

	Main Focus Area	Overall Objective
1	Food Security	Attain food security through increased agricultural production, processing, storage and marketing
2	Crop Production	Improve and intensify crop production in the region to meet local and export requirements for food and raw materials
3	Animal Production	Produce enough quality animals and animal products to match the requirement of both the rapidly increasing human population in the region and for the export market
4	Fisheries	Promote conservation, development and sustainable management, increased production and utilisation of fisheries resources for the benefit of communities in the Partner states and Riparian States
5	Forestry	Promote sustainable management and development of forest resources for environmental and socio-economic benefits
6	Research, Extension and Training	Enhance agricultural production and productivity through effective research – extension – training farmer linkages
7	Plant and Animal Pests and Diseases	Reduce impacts of pests and diseases for plants and animals in order to promote sustainable production and trade
8	Irrigation and Water Management	Increase agricultural production and productivity and stimulate crop diversification and production of forages
9	Natural Disasters	Increase agricultural production and productivity in disaster prone areas, mitigate the effect of natural disasters, and combat the threat of desertification
10	Processing and Marketing	Improve access of agricultural products to domestic and international markets
11	Financing Agriculture and Agro-processing	Secure financial resources that will be invested or lent to the sector to ensure competitive agricultural production and development

91 See the EAC-ARDP, para.3.1

92 Ibid, para. 3.2.

12	HIV/AIDS	Mainstream prevention and control measures to minimise the spread and negative impact of HIV and AIDS on agriculture and rural development
13	Gender	Ensure gender mainstreaming and equity
14	Land and Environment	Promote sustainable management, development, utilisation, improvement and protection of the environment and natural resources

Source: EAC-ARDP, para.4.

It is against the above summarised regional and international agri-food policy context that we now turn to examining Uganda's major agri-food system policies and policy frameworks.

5

THE CONSTITUTIONAL FOUNDATION FOR UGANDA'S AGRI-FOOD SYSTEM POLICIES

Before analysing Uganda's agri-food system policies, it is important to first examine the constitutional foundation for these policies.[93] This is important for two major reasons. First, the Constitution is generally accepted as representing a general consensus of Ugandan citizens on the policy direction that the State should take in dealing with the various issues of relevance to Uganda's development. Second, the Constitution is the supreme law of Uganda with binding force on all authorities and persons in the country.[94] All Government actions, laws, policies and plans should therefore be consistent with it. To the extent that they are inconsistent, they are rendered null and void.[95]

Although Uganda's Constitution does not have any substantive provisions dealing with issues of agriculture, ENR and food security, in its National Objectives and Directive Principles of State Policy, it provides a number of principles which can generally be accepted as laying the constitutional foundation for the development of the country's agri-food system policies and strategies. The most relevant are those National Objectives and Principles of State Policy concerning the right to social and economic development, food and nutrition security, and the protection of the environment and natural resources.

With respect to the right to social and economic development, the Constitution clearly directs that the "State shall endeavour to fulfil the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that – (a) all development efforts are directed at ensuring the maximum social and cultural well-being of the people; and (b) all Ugandans enjoy rights and opportunities and access to education, health services, clean

> Uganda's Constitution commendably considers Government's responsibility to ensure food security for all Ugandans as an integral measure for ensuring social justice and economic development.

93 Uganda's current Constitution, i.e., the Constitution of the Republic of Uganda 1995 is the country's fourth Constitution since independence. It was adopted and enacted into law on the 22nd day of September 1995. It came into force on 8th October 1995.

94 See Article 2 (1) of the Constitution.

95 Ibid.

and safe water, work...*food security*..."[96] It is remarkable that Uganda's Constitution considers Government's responsibility to ensure food security for all Ugandans as an integral measure for ensuring social justice and economic development.

Concerning the issue of food security and nutrition, the Constitution requires the State to: (a) take appropriate steps to encourage people to grow and store adequate food; (b) establish national food reserves; and (c) encourage and promote proper nutrition through mass education and other means in order to build a healthy state.[97] A critical analysis of these measures indicates that as opposed to self-reliance, Uganda is supposed to adopt self-sufficiency as the country's main strategy for ensuring food security. Constitutionally therefore, Uganda is meant to pursue agri-food system policies and strategies aimed at encouraging food self-sufficiency as the country's major strategy for ensuring food security.

Additionally, the Constitution provides very important National Objectives and Directive Principles of State Policy regarding the protection of ENR. Key among these are the principles stated in para. XXVI. In the main, these principles require the state to exercise greater responsibility in the management and utilisation of the ENR to ensure that they meet the development and environmental needs of the present and future generations. The sustainable utilisation and management of ENR is critical for ensuring sustainable increased agricultural production and food security.

Box 5: Uganda's Constitution and the Right to Adequate Food

Uganda's Constitution does not explicitly provide for the right to adequate food as it does other social, economic and cultural rights. Nonetheless, Article 45 of the Constitution states that the rights, duties, declarations and guarantees relating to the fundamental and other human rights and freedoms specifically mentioned in the Constitution shall not be regarded as excluding others not specifically mentioned. Under this provision, the right to adequate food is therefore implicitly protected by the Constitution.

In sum, Uganda's Constitution provides very important policy directions on the development of the country's agri-food system policies and strategies, which if effectively implemented, can help in ensuring the conservation and sustainable use of ENR and improve Uganda's agricultural production and food security. It is important to note though, that all these policy directives and principles are preambular. They are not and do not form part of the substantive provisions of the Constitution. This being so, an important question to ask is: Of what value are the Constitutional policy directives and principles in terms of holding Government responsible and accountable? According to the Constitution, the National Objectives and Directive Principle of State Policy are meant

96 See the National Objectives and Directive Principles of State Policy, para.XIV.

97 Ibid, para. XXII.

to guide organs and agencies of the State, citizens, organisations and other bodies and persons in applying or interpreting the Constitution or any other law and in taking and implementing any decisions for the establishment and promotion of a just, free and democratic society.[98] Ordinarily, this means that they are a mere guide with no binding force on the State and its organs or agencies. For a long time therefore, the much held view has been that anything stated in the National Objectives and Directive Principles of State Policy is not justiciable.

Basing himself on a review of emerging jurisprudence in other jurisdictions, Oloka-Onyango however, rightly argues that the national principles and objectives can be made a justiciable part of the Constitution.[99] For instance, in South Africa, the Courts have emphasised the need to symbiotically relate the preamble and substantive parts of the Constitution in a way that would make the National Objectives and Directive Principles of State Policy justiciable.[100] In fact, in the Uganda case of *Salvatori Abuki and Another v. Attorney General*,[101] emphasising *inter alia* that the provisions of the Constitution relevant to a particular subject must be looked at as a whole rather than in isolation, Justice Egonda Ntende heavily relied on the National Objectives and Directive Principles of State Policy to find that Section 7 of the Witchcraft Act was inconsistent with Article 22 (1) of the Constitution which protects the right to life. In holding that the right to life is inviolable, he argued thus:

> Depending on how one relates the National Objectives and Principles of State Policy to the substantive provisions of the Constitution, they can be made justiciable and form the basis on which to hold the Government accountable.

> I take this view guided by the National Objectives and directive principles of state which we are enjoined to apply in interpreting this constitution in part thereof. I take comfort in part "(xiv) General Social and Economic objectives" which provides;-"The state shall endeavor to fulfill the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that... (b) All Ugandans enjoy rights and opportunities and access to Education, health services, clean and safe water, work, decent, shelter, adequate clothing, food, security and pension and retirement benefits."[102]

98 See para.1 of the National Objectives and Directive Principles of State Policy.

99 Oloka-Onyango, J., (2006), *Interrogating NGO Struggles for Social, Economic and Cultural Human Rights in Contemporary Utake: A Perspective from Uganda*, Rights and Democratic Governance Working Paper Series No.4, pp.24-25.

100 See for instance, *Government of the Republic of South Africa and Others v. Grootboom and Others* (CCT11/00) [2000] ZACC 19, para.23.

101 *Salvatori Abuki and Another v Attorney General* (Constitutional Case No. 2 of 1997) [1997] UGCC 5 (13 June 1997).

102 Ibid.

He conclusively held that an exclusion order under Section 7 of the Witchcraft Act "seems to me to be set in the opposite direction from assuring access of the person banished to any shelter, food, security, clean and safe water, and health services."[103] In sum, depending on how one relates the National Objectives and Principles of State Policy to the substantive provisions of the Constitution, they can be made justiciable and form the basis on which to hold governments/states accountable. It now remains to be seen how the National Objectives and Principles of State Policy dealing with ENR, agriculture and food security issues are complied with in the development of Uganda's agri-food policies and strategies. Before analysing Uganda's specific agri-food system policies, it is important to briefly first examine the country's broad policy frameworks in which these policies are stated, and particularly assess how these frameworks relate to each other.

103 Ibid

6

UGANDA'S MAJOR ENR, AGRICULTURE AND FOOD SECURITY POLICY FRAMEWORKS: THE NEXUS

The broad Government policy frameworks governing ENR, agriculture and food security issues are the National Environment Management Policy for Uganda (NEMPU),[104] the Plan for Modernisation of Agriculture (PMA)[105] and the Uganda Food and Nutrition Policy (UFNP)[106] respectively. This section gives a brief overview of the inter-relationships between and among these policy frameworks. Exploring this nexus is important because in Uganda, like many countries in Eastern and Southern Africa, food security is largely dependent on domestic agricultural production, with most of the food consumed in the country being produced by subsistence farmers.[107] Uganda's agriculture, on the other hand, is nature-based and heavily dependent on ENR. Change in the quality of ENR such as declining soil fertility, loss of biodiversity and drought, negatively impacts on agricultural production and productivity.

In the same vein, agricultural activities also impact on the quality of ENR. For instance, the practice of reclaiming of sensitive ecosystems such as swamps, wetlands and forest reserves in search of agricultural land, which is prevalent in Uganda, and the intensive use of agricultural inputs such as pesticides, herbicides and chemical fertilizers, adversely affect the quality of the environment leading to acidity of soils, pollution of water bodies and climate change, among other negative effects. From this perspective, agriculture is therefore both a cause and victim of environmental degradation. In order, therefore, to improve agricultural production and food security in a manner that prevents/minimises environmental degradation and unsustainable use and management of natural resources, agriculture and food security policies must take into consideration environmental

104 Republic of Uganda (1994), *The National Environmental Management Policy For Uganda*, Ministry of National Resources, Kampala.

105 The Republic of Uganda (2000), *Plan for Modernisation of Agriculture: Eradicating Poverty in Uganda (Government Strategy and Operational Framework)*, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe and Ministry of Finance, Planning and Economic Development, Kampala.

106 Republic of Uganda (2003), *The Uganda Food and Nutrition Policy*, Ministry of Agriculture, Animal Industry and Fisheries and Ministry of Health, Kampala.

107 Ibid, Section 1.3, p.3.

concerns. Similarly, ENR policies must take into account issues of sustainable agriculture and food security.

6.1. Agriculture and Food Security Considerations in ENR's Major Policy Framework

As already alluded to, Uganda's major policy framework governing ENR issues is the NEMPU. The NEMPU was adopted in 1994 with the major goal of ensuring sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a long-term basis.[108] Critical for the linkage between ENR, agriculture and food security policies and policy framework, the NEMPU emphatically states, as one of its key principles to guide ENR policy development and implementation, that Uganda's economy should be based on sustainable natural resource use and sound management.[109] This means that all Uganda's economic development policies and policy frameworks, including those governing issues of agriculture and food security, must take into consideration issues of environmental protection and sustainable use and management of natural resources. The extent to which agriculture and food security policies and policy frameworks do this is remains to be seen in the proceeding subsections.

The NEMPU also explicitly recognises that "long-term food security depends on sustainable natural resource and environmental management."[110] This is for the major reason that, as earlier stated, food security in Uganda largely depends on domestic agricultural production, which in turn depends on ENR. As one of the ways to protect the environment and ensure sustainable use and management of natural resources, the NEMPU calls for the development, dissemination and use of environmentally-friendly and socially-acceptable and affordable technologies for the efficient use of natural resources.[111] Arguably, this call mainly applies to agricultural technologies. In the bid to increase agricultural production, Uganda's agricultural policies are therefore supposed to promote technologies that are environmentally friendly and socially acceptable.

Further, in its Chapter Four, the NEMPU explicitly calls for the promotion of farming systems and land-use practices that conserve and enhance land productivity in an environmentally sustainable manner.[112] To this end, it gives a number of key principles for the attainment of this objective. First, it provides that increased agricultural production should be based on improved farming systems and security of land tenure, rather than expansion of agricultural land. Second, it emphasises that agricultural policy and planning should be based on up-to-date soils surveys and mappings and should incorporate the environmental costs of soil degradation in the economic analysis of agricultural development programmes and projects. NEMPU also stresses that agricultural policy and planning should build on viable traditional farming systems and should be closely

108 Supra note 104, Section 2.1.

109 Ibid, Section 2.3.

110 Ibid.

111 Ibid.

112 Ibid, Section 4.1

coordinated with other resource use policy and planning. In terms of the strategies to promote and achieve farming systems and land-use practices that conserve and enhance land productivity in an environmentally-sustainable manner, it rightly calls for the enhancement and strengthening of environmental concerns in agricultural research, training and extension; placing greater emphasis on environmentally-friendly means of increasing agricultural production; undertaking a national soils survey and mapping; and formulation of a national soils policy.[113] It also calls for providing incentives for soil and water conservation and good husbandry practices; as well as reviewing and enforcing existing laws.[114]

To further protect the environment from the adverse effects of agricultural activities, the National Environment Act – which is NEMPU's major implementation legal framework, requires developers of agricultural projects including: large-scale agriculture; use of new pesticides; introduction of new crops and animals; and use of fertilizers, to submit project briefs to the lead agencies for purposes of Environmental Impact Assessment (EIA).[115] Where the lead agency is of the view that the project may, is likely or will have a significant impact on the environment, an EIA must be undertaken[116] to mitigate any possible adverse effects.

In terms of governance and institutional framework, NEMPU rightly recognises that environmental concerns are cross-sectoral and require an integrated multi-sectoral approach.[117] In this respect, it provides for the Policy Committee on Environment composed of Ministers from different ministries including the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).[118] Inclusion of the Minister of MAAIF on this committee was largely aimed at ensuring, among other things, that agriculture and food security issues are effectively addressed in the implementation of NEMPU and other related processes.

The important questions to ask at this point are: To what extent do Uganda's agriculture and food security policies and policy frameworks follow the above summarised policy directives, principles and strategies from the NEMPU? Specifically, to what extent do they take into consideration ENR issues? The next sections try to explore answers to these questions, among other issues.

113 Ibid.

114 Ibid.

115 See Section 19 and the third schedule of the National Environment Act, Cap 153, Laws of Uganda, 2000.

116 Ibid, section 19 (3).

117 Supra note 104, Section 5.2.

118 Ibid.

6.2. ENR Considerations in Agriculture and Food Security Major Policy Frameworks

First, the PMA, which is Uganda's major agricultural policy framework, correctly recognises agricultural activities as a major source of environmental degradation in Uganda. Quoting Slade and Weitz, who estimated the cost to the national economy due to environmental degradation to lie between 4 to 12 per cent of GDP, it is stated that if one attributes bio-diversity loss, deforestation and soil erosion to agricultural activities, then the agriculture sector alone is responsible for 86 to 91 per cent of the environmental degradation in monetary terms.[119] Second, the PMA recognises natural environmental factors as some of the major constraints to agricultural production. These factors include limited access to land, the problem of water for production, soil erosion, soil infertility, deforestation and drainage of swamps.[120]

Third, in order to achieve its vision and mission of transforming Uganda's agriculture from subsistence to commercial, the PMA sets out, as one of its major objectives, to promote sustainable use and management of natural resources by developing a land-use and management policy and promotion of environmentally-friendly technologies.[121] Sustainable natural resource utilisation and management is, therefore, listed as one of the pillars and seven key priority areas for the PMA.[122] In this regard, the PMA states that considerations will be made to address environmental concerns in the agriculture sector priority programme areas such as research, extension, agro-processing and natural resource management.[123]

To strengthen ENR considerations in agricultural activities further, the PMA also emphasises the great need to ensure effective linkages between Agricultural Advisory Services, the Production and Environmental Committees at the various levels of local government.[124] This is an important issue in terms of establishing an effective agri-food system which requires further research. More research is also needed to establish the existence, functionality and level of coordination of not only the above-mentioned committees but also other local-level committees and institutional mechanisms provided for and/or established by other agri-food system policy and legal frameworks.

In furtherance of the objective of strengthening consideration of ENR issues in agricultural policies and activities at the centre, the PMA includes the ministry responsible for water,

119 Supra note 105, p. 77.
120 Ibid, pp.12 and 28.
121 Ibid, Section 4.3, p.27.
122 Ibid, Section 7.7, p.73
123 Ibid, p.77.
124 Ibid, p.78.

lands and environment in its implementation framework.[125] This ministry is supposed to take charge of land, water for production, agro-forestry and environmental protection issues in the implementation of the PMA.[126] This is very commendable and, if effectively implemented, can go a very long way in ensuring that ENR issues are adquately addressed in agricultural policies and activities.

In the final analysis, as far as the broad sectoral policy guidelines, principles and aspirations are concerned, it is tenable to conclude that although there may still be room for improvement, Uganda's major agri-food policy frameworks are fairly well-linked and coordinated. The major question is whether the policy directives, principles and strategies enunciated in these policy frameworks are carried through to the specific agri-food system policies and in their implementation.

125 Ibid, Section 8.3, p.84.

126 Ibid.

7

UGANDA'S MAJOR AGRI-FOOD SYSTEM POLICIES

Uganda's specific agri-food system policies must be understood within the broad national policy context. Like many other national development policies and strategies, Uganda's agri-food system policies have largely been shaped by Government's overarching policies of liberalisation and decentralisation. Since the late 1980s, Government has been carrying out several policy reforms aimed at transforming and liberalising Uganda's economy from one in which it is said there was excessive state intervention to a free-market economy. Government's policy of liberalisation is aimed at increasing efficiency of resource allocation, while reducing the direct role of government in production and commercial activities.[127] With the free-market/liberalised economy, the role of the state is limited to providing classic public goods and creating an enabling environment for private sector-led growth.[128] Government's other main objective of liberalising the economy is therefore to promote the private sector as the main engine for economic growth.[129]

In the agriculture sector, reforms aimed at creating a free-market economy included: liberalisation of agricultural input trade, liberalisation of domestic and export produce marketing and processing, removal of restrictive tariff and non-tariff barriers (particularly for agricultural inputs), and abolition of taxes on agricultural exports.[130] Government policy of liberalisation also led to the privatisation and divesture of public enterprises.[131] This led to the disbandment of public bodies such as the Coffee Marketing Board, Lint Marketing Board

> The Ministry of Finance, Planning and Economic Development acknowledges that although the liberalisation/free market-approach initially registered some successes in spurring agricultural growth, its effectiveness in stimulating agricultural growth and development has been questionable during the period after 2000

127 Ibid, Section 5.2, p.33.

128 MFPED (2008), *Agricultural Sector Investments and Institutional Performance in Uganda*, Ministry of Finance, Planning and Economic Development, Discussion Paper No.17, Ministry of Finance, Planning and Economic Development, Kampala, p.15.

129 Supra note 105, Section 5.5, pp.33-34.

130 Ibid, p.34.

131 Ibid.

and the Produce Marketing Board that had the marketing monopoly of coffee, cotton and food crops respectively. In a recent study on agriculture sector investment and institutional performance, the Ministry of Finance, Planning and Economic Development (MFPED) acknowledges that although the liberalisation/free market-approach initially registered some successes in spurring agricultural growth, its effectiveness in stimulating agricultural growth and development has been put to question during the period after 2000.[132] During this period, as was highlighted in section 2 of this paper, Uganda has witnessed significant declines in agricultural production to the extent that in some years, the agriculture sector registered zero and negative growth. The sector's contribution to GDP has also questionably declined over the years. Could it be that liberalisation/ free-market approach was the wrong prescription for the challenges facing Uganda's agriculture sector? The ensuing analysis in this section provides some perspectives in answer to this question.

With respect to decentralisation as another overarching government policy that has shaped Uganda's agri-food system policies, its major thrust is to transfer substantial political, financial and planning responsibilities from central government to local governments (i.e. districts and sub-counties).[133] It is based on the premise that local governments are better placed to respond to the needs of local communities.[134] Decentralisation was a well conceived policy, which, if effectively implemented, would not only improve service delivery but would also empower the people and promote democracy in policy and decision making. But for decentralisation to work effectively, the local governments must be given sufficient powers to execute their roles. They must also have adequate human and financial resources. While some of these issues were identified in the PMA policy document as matters that required serious attention, over ten years into its implementation, there is very little progress in addressing them. For instance, because of the limited financial resources and the inefficiency of District Service Commissions to promptly recruit staff among other reasons, there are many posts of technical officers at the districts which remain unfilled.[135] This problem is compounded by the proliferation of new districts which has resulted in existing staff being shared between and among districts.[136] These are big challenges that need to be addressed soonest if Uganda is to have an efficient agri-food system.

Decentralisation was a well-conceived policy, but for it to work effectively, Local Governments must be given sufficient powers and resources (human and financial) to execute their roles.

132 MFPED (2008), supra note 128, p.16.

133 Supra note 105, Section 5.2, p.35.

134 Ibid.

135 Republic of Uganda (2010), *Agriculture for Food and Income Security: Agriculture Sector Development Strategy and Investment Plan 2010/11-2014/15*, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, p.31.

136 Ibid.

Having briefly analysed the broad national policy context in which Uganda's agri-food system policies should be located; it is now apposite to review some of these policies.

7.1. From Subsistence to Commercial Agriculture

Uganda's agriculture is characterised by many scattered smallholder farmers. The majority of these farmers are engaged in subsistence farming. As of 2000, 70 per cent of Uganda's farmers were estimated to be subsistence farmers, 25 per cent were estimated to be semi-commercial farmers and only 5 per cent were estimated to be commercial farmers.[137] Even when the majority of Uganda's farming households are engaged in subsistence agriculture, they cannot produce enough food to feed their families. Many farming households are also very poor and cannot generate enough income to meet their households' basic requirements from the market.[138]

Government's major policy prescription for these challenges has been to advocate for and promote the shift from subsistence to commercial agriculture. The major thrust of the PMA is therefore to re-orient subsistence farmers from producing predominately for household consumption, to producing for the market. Its mission is explicitly stated as "eradicating poverty by *transforming subsistence agriculture to commercial agriculture.*"[139] As will become apparent, this policy position of transforming Uganda's agriculture from subsistence to commercial (i.e. agricultural production for the market) runs through almost all Uganda's agricultural policies and initiatives. For instance, NAADS as Government's major programme for transforming Uganda's agriculture has set its target to steadily decrease the percentage of subsistence farmers from around 82 per cent in 2003 to 40 per cent by 2025.[140] In this same period, NAADS also aims to increase the number of commercial farmers from 5 per cent to at least 20 per cent.[141]

To achieve its mission of transforming Uganda's agriculture from subsistence to commercial agriculture, the PMA outlines seven priority intervention areas, namely: research and technology development; agricultural advisory services; agricultural education; improving access to rural finance; agro-processing and marketing; sustainable natural resource use and management; and improving and establishing supportive infrastructure.[142] The specific policies governing many of these areas are analysed later on in this section.

Concerning the extent to which Uganda's policy shift to commercial agriculture takes into consideration ENR issues and its potential to guarantee food security, the PMA explicitly states that a transformed subsistence farmer would be one that can produce and sell

137 Supra note 105, Section. 4.7, p.29.

138 Ibid, Section. 2.3, p.11.

139 Ibid, Section 4.4, p.29. Emphasis added.

140 See NAADS (2003), supra note 21, p.6.

141 Ibid.

142 Supra note 105, Chapter 7

more to the market *without compromising household food security*[143] and one who manages his or her farm activities in a manner that does not degrade the environment.[144] If in practice, Uganda's policy of commercial agriculture indeed ensures that in selling their produce, farmers do not compromise their household food security and that their farming practices do not degrade the environment, then its potential to ensure food security and sustainable use and management of ENR is very good.

7.2. Agro-chemical Use for Commercial Agriculture

Commercial agriculture is normally associated with increased use and deployment of improved seed technologies and agro-chemicals like herbicides, pesticides and chemical fertilizers. Although NAADS rightly recognises that modern/commercial agriculture does not necessarily mean heavy dependence on chemical inputs and actually identifies the question of promoting appropriate use of and alternatives to agro-chemicals as one of the issues it needs to address, increased use of chemicals in agricultural production is very much envisaged and encouraged by the PMA.[145] If Uganda's commercial agriculture is going to heavily rely on agro-chemicals, it cannot be sustainable and cannot guarantee long-term increased agricultural production and food security. Heavy dependence on agro-chemicals is generally known to be detrimental to the environment and natural resources which are the life support of agricultural production, which in turn constitutes the major basis for food and income security for majority of households in Uganda. Agro-chemicals are generally known to contaminate soil, ground and surface water with their dangerous residues.[146] It is therefore important for Government to strictly control and regulate the use of agro-chemicals if it is to achieve increased sustainable agricultural production and food security. This should be coupled with efforts to train farmers on how to cautiously use and mitigate the misuse of agro-chemicals.

7.3. Private Sector-Led Agriculture Development

As earlier mentioned, under the liberalisation policy, the role of Government in agricultural development is restricted to providing classic public goods and creating an enabling environment for the private sector. It is therefore Government policy that agriculture sector growth and development should be private sector-led. To this end, Government is not to be involved in commercial activities that can be carried out by the private sector.[147] Among the activities that the public sector is not supposed to be involved in include: production or supply of planting materials or other agricultural inputs (except for research and demonstration); supply of artificial insemination or bulls; processing or

143 Ibid, Section 4.2, p.26. Emphasis added.

144 Ibid.

145 Ibid, p.27. See also the Foreword to the PMA by His Excellency the President of Uganda, Mr. Yoweri Kaguta Museveni.

146 See Varca, L., (2002), Impact of Agro-chemicals on Soil and Water Quality, Food and Fertilizer Technology Centre, Taipei. Available at http://www.agnet.org/library/eb/520/ [Accessed on 02 February 2011].

147 Supra note 105, p. ix.

marketing agricultural outputs; subsidisation or provision of credit directly to farmers; construction of large irrigation infrastructure; and provision of tractor hire services and motorised farm power.[148] According to the PMA, these activities are potentially profit-making and should therefore be left to the private sector.

Although the private sector-led agriculture development policy is not bad in itself, it is problematic in two major ways, given Uganda's current circumstances. First, despite Government efforts, private sector dealing in the provision of agricultural goods and services is still very under-developed. In the area of agricultural extension, for instance, this is forcing government to convert public extension staff in local governments to private service providers under NAADS.[149] Second, the cost of provision of many agricultural goods and services by the private sector is very expensive for the majority of farmers in the country. For instance, regarding the question of provision of agricultural credit, a fairly recent study by the Economic Policy Research Centre (EPRC) indicates that financial institutions offering the service charge very high interest rates, ranging from 36 to 48 per cent.[150] The majority of Uganda's farmers cannot afford such costs. In sum, as long as the private sector remains underdeveloped and charges prohibitive costs for its services, and majority of farmers remain poor, Government withdrawal from certain activities will continue to negatively affect agricultural production and productivity. As is the case now, many farmers will not be able to afford the required inputs and services to improve their agricultural enterprises.

7.4. Market-Responsive and Demand-Driven Agricultural Research

The role of research in agricultural production and development cannot be over-emphasised. Agricultural research is critical for developing production-enhancing and other technologies that can help to address challenges faced by farmers. The success of agricultural research in bringing about increased agricultural production and productivity, however, largely depends on whether its policy direction is tailored to address the real needs of the majority of farmers. What then is Uganda's major policy direction for agricultural research? To what extent does it take ENR concerns into consideration? How tailored is it to address the needs of majority of farmers?

To enhance the contribution of agricultural research to sustainable agricultural productivity, food security and poverty eradication among other development goals, Uganda adopted the National Agricultural Research Policy in 2003 as the country's major policy framework governing issues of agricultural research.[151] Uganda's agricultural research policy direction

148 Ibid.

149 MAAIF (2009), Policy Position of the Ministry of Agriculture, Animal Industry and Fisheries on the Proposed Conversion of Public Extension Staff in Local Governments to National Agricultural Advisory Services, (Paper on file).

150 EPRC (2009), Agriculture Sector Public Expenditure Review, Final Report submitted to the Ministry of Agriculture, Animal Industry and Fisheries.

151 The Republic of Uganda (2003), *The National Agricultural Research Policy*, Ministry of Agriculture, Animal Industry and Fisheries, Entebbe, Section 2.2.

is clearly stated as "a market-responsive, client-oriented and demand-driven national agricultural research system..."[152] The National Agricultural Research Policy addresses environmental concerns in many respects. First, it is cognisant of the fact that the sustainability of agricultural production largely depends on the proper use of the natural resources.[153] Second, it sets out its mission as "To generate and disseminate appropriate, safe and cost-effective technologies, *while enhancing the natural resource base*."[154] Third, and most important, Uganda's agricultural research policy framework clearly states that *"Environmental concerns will be taken into account in all the agricultural technology generation processes."* [155] It is thus tenable to conclude that, atleast on paper, Uganda's agricultural research policy sufficiently addresses environmental concerns. But how about in practice? Exploring the extent to which environmental concerns are actually addressed in agricultural technology generation processes is outside the scope of this paper. Suffice to say that this is an important matter that warrants a study of its own.

The ENR-specific considerations aside, how tailored is Uganda's agricultural research policy to address the needs of the majority of Uganda's farmers? In Uganda's circumstances, as long as research, or indeed any other agricultural initiative, does not address the needs of the majority of the poor rural farmers, there is little progress that can be expected in terms of improving agricultural production and food security. This is essentially because the poor rural farmers and their farming communities constitute the major force behind agricultural production in Uganda. Gladly, the National Agricultural Research Policy sets out as one of its major objectives to "empower farmers by involving them in identifying and prioritizing their research needs and in procuring agricultural research services, while technically and professionally guiding them to make informed choices."[156] It is stressed that special emphasis will be on ensuring that the research services especially target increasing income opportunities and livelihoods of poor farmers, women and other economically-disadvantaged groups in society.[157]

In Uganda's circumstances, as long as research or indeed any other agricultural initiative does not address the needs of the majority of the poor rural farmers, there is little progress that can be expected in terms of improving agricultural production and food security.

The key strategies for achieving the above-mentioned objectives include: promoting the formation or strengthening of farmers' groups and forums at various levels of local

152 Ibid, Section 2.2.
153 Ibid, Section 2.3.8.
154 Ibid, Section 2.2. Emphasis added.
155 Ibid, Section 2.3.8. Emphasis added.
156 Ibid, Section. 2.4.
157 Ibid, Section. 2.3.2.

governments through which research needs should be articulated; formation of local consortia to play a greater role in technology management; building the capacity of farmers, individually or in groups to make informed decisions; enhancing participatory planning by involving farmers in priority setting and conducting agricultural research in their localities, with particular reference to problem-solving, adaptive research; and promoting participatory monitoring of research services by involving all stakeholders including farmers.[158]

To the extent that Uganda's agricultural research policy puts special emphasis on addressing the needs of the poor rural farmers, women and other disadvantaged groups, and involving them in problem identification, priority setting, planning, monitoring and evaluation of agricultural research, then its potential to contribute to increased agricultural production, food and income security is great. Special research attention to the needs of these categories of persons is critical for increasing agricultural production and productivity as they constitute the biggest portion of the country's farmers and agricultural labour force. The major concern, however, is the over-emphasis of Uganda's agricultural research policy on market-oriented/responsive research. This over-emphasis of market-responsive research can skew public research away from those crops and animals that are very vital to ensuring household and community food security in rural areas.[159] Crops such as yams and sorghum are, for example, not "marketable" in the traditional sense, but are nevertheless very critical for local livelihood security—especially during periods of food scarcity.[160] With the over-emphasis of market-oriented research, such crops may not get the attention they deserve. This is dangerous in terms of ensuring household and community food security.

The major concern, however, is the over-emphasis of Uganda's agricultural research policy on market-oriented/responsive research. This over-emphasis of market-responsive research can skew public research away from those "unmarketable" crops and animals vital to ensuring household and community food security in rural areas

7.5. Decentralised and Private Sector-Serviced Extension and Advisory Services

In the process of developing the PMA as Uganda's major agriculture sector policy framework, it was realised that an effective agricultural extension was essential to the realisation of the development objectives of the Plan. The National Agricultural Advisory Services (NAADS) was thus included in the PMA to spearhead the establishment of a

158 Ibid, Section 3.2.

159 Naluwairo, R., (2011), *Promoting Agriculture Sector Growth and Development: A Comparative Analysis of Uganda's Political Party Manifestoes (2011-2016).* ACODE Policy Research Series, No.41, 2011, Kampala, p.18.

160 Ibid.

new approach to agricultural extension in Uganda. In 2001, NAADS was established with one of its major aims being to promote food security, nutrition and household incomes through increased productivity and market-oriented farming. In doing this, Government policy (which is also the NAADS vision) is to transform Uganda's publicly-financed and delivered agricultural extension to a "decentralised, farmer-owned and private sector-led advisory services, contributing to the realisation of the agricultural sector objectives."[161] The important question to ask now is: To what extent does this private sector-led extension policy and system address ENR issues and what potential does it have in terms of improving Uganda's agricultural production and food security?

First, as stated in its vision above, it is clear that NAADS aims to contribute to the realisation of the agriculture sector objectives. One of the major objectives of the Agriculture sector is to promote sustainable use and management of natural resources and promotion of environmentally-friendly technologies.[162] NAADS is therefore supposed to contribute to this objective. Regrettably, though, the legal framework governing the operations of NAADS does not include the promotion of sustainable use and management of ENR among its objectives. According to this legal framework, the objectives of NAADS are to: promote food security, nutrition and household incomes through increased productivity and market farming; empower all farmers to access and utilise contracted agricultural advisory services; and promote farmer groups to develop capacity to manage farming enterprises.[163] NAADS also aims to: create options for financing and delivery of agricultural advice for the different types of farmers; gradually shift from public delivery to private delivery of agricultural advice; develop private sector agricultural delivery capacity and systems; and catalyse the participation of the private sector to fund agricultural advisory services.[164]

According to the PMA, under NAADS as a holistic approach to agricultural extension, rather than engaging in the delivery of messages or inputs, the agricultural advisors are expected to engage their clients in critical thinking and discussions about their agricultural endeavours, and to provide them with a wide range of services including those concerned with environmental management.[165] Unfortunately, the legal framework governing the operations of NAADS does not explicitly require provision of information and advice on sustainable use and management of ENR as one of the functions of the service providers.[166] This notwithstanding, in 2003, NAADS formulated and adopted a comprehensive natural resources strategy to ensure that sustainable natural resource use

161 Supra note 105, Section 7.3, p.54.

162 Ibid, Section 4.3, p.27.

163 See Section 5, NAADS Act, Act 10, 2001.

164 Ibid.

165 Supra note 105, Section 7.3, p.53.

166 About the detailed list of functions of the service providers under NAADS, See Section 25 and the Fourth schedule, NAADS Act.

and management issues are taken into consideration throughout all its activities.[167] The strategies adopted in this regard include: recognising and registering of natural resource use groups like forest and water user groups as farmer groups; issuance of guidelines on how to actively promote equitable inclusion of natural resource-focussed farmer groups to represent farmers' groups on the farmers' forums; training and sensitising farmer groups and farmer forum members on ENR and other cross-cutting issues; and providing information and feedback to farmers' groups and farmer forums on profitability and ecological sustainability of various enterprises including natural resource-based off-farm enterprises and sustainable natural resource management approaches in on-farm enterprises.

Other strategies for ensuring that ENR issues are taken into consideration in all NAADS activities include: issuance of guidelines for the development of terms of reference for the service providers to ensure integration of ENR and other cross-cutting issues; inclusion of off-farm natural-based enterprises like fisheries and forestry in enterprise selection choices; inclusion of packages on ENR use and management in the re-orientation/retooling of curricular for the service providers; and the integration of sub-county and district NAADS work plans with the sub-county and district environmental action plans. In their totality, the strategies in the NAADS Natural Resource Strategy sufficiently integrate ENR issues in Uganda's agricultural extension and advisory services system. The question is whether they are followed and implemented in real practice. This is yet another important issue that requires further research.

Regarding the important question as to whether or not a farmer-led, demand-driven and privately-serviced agricultural extension and advisory services system can guarantee food security, this largely depends on the capacity of the farmers not only to articulate their needs and demand for services, but also to hold the duty-bearers accountable. It also depends on the competences of the private sector to deliver the required services. In other words, a farmer-led, demand-driven and privately-serviced agricultural extension and advisory services system can only guarantee improved agricultural production, food and income security in circumstances where the farmers are well-informed, empowered and where the private sector is developed with enough and competent service providers. Unfortunately, this is not the case in Uganda. Although NAADS is working hard to develop the capacity of farmers and competences of the private sector in the above regard, over ten years down the road, it still has a very long way to go.

7.6. Zonal Agricultural Production, Agro-Processing and Marketing

Uganda's agriculture is characterised by many scattered smallholder farmers, the majority of whom are engaged in subsistence agriculture using rudimentary technologies. Many of these farmers engage in numerous farm commodities on their small pieces of land. As a result of all this, they produce low and unsustainable marketable volumes and

167 See NAADS (2003), supra note 21

products of poor quality. The nature of the majority of Uganda's farmers, as summarised in the foregoing narrative, also makes it difficult for them to efficiently access inputs and market their produce collectively. This means that they incur high production and transaction costs which adversely affect the profitability of their agricultural enterprises.

To address the afore-mentioned challenges and promote commercial agriculture further, in 2004, the Government took a policy position to organise the country's agricultural production, agro-processing and marketing on the basis of zones by adopting the National Plan for Zonal Agricultural Production, Agro-processing and Marketing.[168] This plan seeks to promote agricultural enterprise development based on zones of production excellence so as to take maximum benefit of the comparative and competitive advantage. Agricultural zoning is expected to lead to the creation of domestic markets, improvement of market access and marketing efficiency arising from effective accessibility of technologies and efficient delivery of advisory and other support services. It is also expected to result in reduced transaction costs of the scattered farmers as a result of exploitation of the comparative and competitive advantages. Table 4 below shows Uganda's agricultural zones and their selected enterprises.

Table 4: Uganda's Agricultural Zones and their Selected Enterprises

Zone No	Zone Name	Districts	Enterprises
I	North Eastern Dry lands	Moroto, Northern Kotido and Eastern Kitgum	Gum Arabica, Simsim, Apiculture, Goats/Skins, Beef cattle/Hides, Ostriches and Sunflower
II	North Eastern Savannah Grasslands	Pader, Kitgum Eastern Lira, Katakwi, Northern Sironko, Northern Kapchorwa, Nakapiripirit, Southern Kotido	Apiculture, Beef cattle/Hides, Goats/Skins, Simsim, Cassava, Pulses and Sunflower
III	North Western Savannah Grasslands	Adjumani, Western Nebbi, Arua, Moyo,Yumbe, Northern Gulu, Northern Apac and Western Lira	Spices, Tobacco, Apiculture, Cotton, Pulses, Simsim, Robusta coffee
IV	Para Savannahs	Eastern Nebbi, South-western Gulu and Western Masindi	Spices, Fisheries, Cassava, Apiculture, Beef cattle/Hides, Goats/Skins and Cotton

168 The Republic of Uganda (2004), *INCREASING INCOMES THROUGH EXPORTS: A Plan for Zonal Agricultural Production, Agro-processing and Marketing.*

V	Kyoga Plains	Kayunga, Kamuli, Iganga, Northern Bugiri, Tororo, Northern Busia, Southern Mbale, Pallisa, Kumi, Soroti, Kaberamaido, Southern Lira and Southern Apac	Fisheries, Apiculture, Maize, Pulses, Beef cattle, Cassava and Goats
VI	Lake Victoria Crescent	Kampala, Mukono, Wakiso, Eastern Mpigi, Eastern Masaka, Eastern Rakai, Kalangala, Jinja, Mayuge, Southern Bugiri and Southern Busia	Robusta coffee, Fisheries, Spices, Floriculture, Horticulture, Vanilla, Cocoa and Dairy cattle
VII	Western Savannah Grasslands	Hoima, Kiboga, Southern Luwero, Mubende, Kibaale, Kyenjojo, Kabarole, Kamwenge and Southern Kasese	Robusta coffee, Tea, Apiculture, Maize, Bananas (Brewing), Beans and Beef cattle/Hides
VIII	Pastoral Rangelands	Eastern Masindi, Nakasongola, Northern Luwero, Central Kiboga, Southern Mubende, Western Mpigi, Western Masaka, Western Rakai, Sembabule, Eastern Mbarara, Southern Ntungamo and Northern Bundibugyo	Beef cattle, Dairy cattle, Goats, Spices (Bird's eye chillies), Apiculture, Citrus and Pineapples
IX	South Western Farmlands	Western Mbarara, Bushenyi, Northern Ntungamo, Rukungiri and Northern Kanungu	Robusta coffee, Tea, Dairy / Hides, Fisheries, Bananas (Dessert), Vanilla and Tobacco
X	Highland Ranges	Northern Mbale, Southern Sironko, Southern Kapchorwa, Southern Kanungu, Kabale, Kisoro, Northern Kasese and Southern Bundibugyo	Arabica Coffee, Passion fruit, Vanilla, Dairy / Hides, Spices (Cardamom, White/Black pepper), Maize and Irish potatoes

Source: The National Plan for Zonal Agricultural Production, Agro-processing and Marketing.

Under the National Plan for Zonal Agricultural Production, Agro-processing and Marketing, Uganda is divided into ten zones of production excellence. The zones were mapped out using many factors including climatic differences, relief variation, socio-economic and cultural characteristics, and the need to have sufficient acreage under production for the selected high-value enterprises.[169] Each zone has averagely eight agricultural enterprises. The enterprises were selected according to the value of the product on the export market, availability and access to that market and agro-ecological suitability of the enterprise to the respective zones.[170] Other factors taken into consideration in selecting the different enterprises for the different production zones included existing

169 Ibid, p.iv.

170 Ibid.

production, processing and marketing infrastructure; existing support institutions; and the availability and system for the supply of inputs, skills and knowledge.[171]

Zonal agricultural production, agro-processing and marketing is a well-conceived policy which, if well implemented, has great potential to stimulate agricultural production and improve marketing of agricultural produce. This could as a result improve the income and food security of the poor rural farmers, their farming communities and the country at large. There is, however, need to revisit the number of enterprises focused on in each zone. As earlier stated, each zone of production excellence has on average eight enterprises. Given the limited resources among other issues, these are many enterprises to focus on. Besides, having such a big number of enterprises per zone undermines the very essence and rationale of establishing zones of production excellence – which is to encourage and promote specialisation.[172] It is therefore highly recommended that the number of enterprises per agricultural zone should be scaled down.

In the spirit of strengthening the integration of ENR issues in agricultural policies and activities, the National Plan for Zonal Agricultural Production, Agro-Processing and Marketing also needs to be revisited to purposively increase on the number of ENR-based enterprises. The strategy hardly contains any ENR-based enterprises. NAADS as one of Uganda's major programmes for implementation of the zonal agricultural production policy must also synchronise its activities with the zonal enterprises. There are reports indicating that the NAADS process of farmer-based enterprise has very little relation with the enterprises provided for in the zonal agricultural production, agro-processing and marketing strategy policy document. In Iganga district, for instance, a recent study by EPRC indicates that the NAADS process of determining enterprises that farmers should undertake is heavily influenced by politicians and administrators at the district who have particular technologies they want to supply.[173]

7.7. Modern Biotechnology for Increased Agricultural Production and Food Security

One of the broad PMA strategies for transforming Uganda's agriculture and improving agricultural production and food security is to promote and support the development and adoption of production-enhancing technologies.[174] In this respect, the PMA lists Genetically Modified Organisms (GMOs) as a key strategic research area that the country should invest in.[175] In 2008, Government made progress by adopting the National Biotechnology and Biosafety Policy to promote research in and use of modern biotechnology (in particular GMOs) in ensuring food security and protection of the

171 Ibid, p.v.

172 Ibid, p.iv.

173 Okoboi, G., (2010), *Economic and Institutional Efficiency of the National Agricultural Advisory Services' Programme: The Case of Iganga District*, Economic Policy Research Centre, Kampala, p.21.

174 Supra note 105, Section 4.5, p.27.

175 Ibid, p.52

environment among other national developmental goals.[176] Specifically, this policy framework seeks to: build and strengthen national capacity in biotechnology research, development and application; promote the utilisation of biotechnology products and processes as tools for national development; provide a regulatory and institutional framework for safe and sustainable biotechnology development and applications; and promote ethical standards in biotechnology research and development.[177]

A major shortcoming of Government policy to promote modern biotechnology in national development is that it is not based on the precautionary principle – which is the most important underlying principle in ensuring biosafety.[178] There is no reference at all in the National Biotechnology and Biosafety Policy to the precautionary principle, not even in its guiding principles. This is notwithstanding that the policy instrument states that it is consistent with the principles laid out in the CPB and the National Environment Act. As long as Uganda's efforts to deploy modern biotechnology in national development is not based on the precautionary principle, it cannot guarantee environmental protection and ensure long-term increased agricultural production and food security. Although modern biotechnology has great potential to improve agricultural production and food security, the CPB and indeed the Rio Declaration on Environment and Development represent international consensus that if not developed and deployed in accordance with the precautionary principle, it could have adverse effects on the conservation and sustainable use of biological diversity.

A major shortcoming of the Government policy to promote modern biotechnology in national development is that it is not based on the precautionary principle – which is the most important underlying principle in ensuring biosafety.

It is also notable that while Government is putting a lot of effort in promoting modern biotechnology (particularly GMOs) including developing a national policy on the matter and establishing a national modern biotechnology centre, there is very little emphasis to promote and support the development and growth of the organic agriculture sub-sector. Yet organic agriculture remains the most environmentally, socially and economically sustainable farming system for the rural poor.[179] Organic agriculture is based on minimum use of off-farm inputs (which makes it the cheap alternative for the poor) and on methods that restore, maintain and enhance biodiversity and ecological harmony, making it the most environmentally-friendly farming system. There is increasing evidence that if given the necessary policy attention, organic agriculture has great potential not only to increase agricultural

176 Republic of Uganda (2008), *National Biotechnology and Biosafety Policy*, Ministry of Finance, Planning and Economic Development, Kampala, Section 3.1.

177 Ibid, Section 3.2.

178 As pointed out in Section 4.1, the precautionary principle is the hallmark of the CPB to which Uganda is a party.

179 See generally UNEP-UNCTAD (2008), *Organic Agriculture and Food Security in Africa*, United Nations Conference on Trade and Development and United Nations Environment Programme.

production and food security among the rural smallholder farmers, but also to increase their incomes and wealth-creation opportunities.[180]

7.8. Acreage Expansion for Increased Agricultural Production

In section 4, it was pointed out that in order to promote farming systems and land-use practices that conserve and enhance land productivity in an environmentally sustainable manner, NEMPU emphasises that increased agricultural production should be based on improved farming systems and security of tenure, rather than on expansion of agricultural land. Although the PMA, as Uganda's major agriculture sector policy framework, states that agricultural transformation should start with increased agricultural productivity per unit,[181] it calls for the generation and adoption of appropriate technologies for the expansion of acreage under cultivation as a way of increasing agricultural production.[182] The PMA notes in this regard that past increases in food production resulted mainly from such expansion in cultivated area.[183] But at what cost to ENR was the increased agricultural production based on expansion of agricultural land? How sustainable can it be?

While it is appreciated that given the increasing population, expansion of agricultural land becomes inevitable, Government should be slow in encouraging the policy of acreage expansion for increased agricultural production. As NEMPU rightly emphasises, the main focus should be the improved farming systems and increased agricultural production per unit. Acreage expansion for increased agricultural production if not done cautiously, can adversely affect ENR and as such, can neither sustain increased agricultural production nor ensure long-term food security.

7.9. Market-Based Food Security

In both its objectives and strategies, the PMA as Uganda's main agriculture policy framework emphatically states that food security shall be guaranteed through the market and improved incomes rather than emphasising household self-sufficiency.[184] There are a number of issues concerning this market-based approach to food security. First, it is inconsistent with the National Objectives and Directive Principles of State Policy as provided for in the Constitution. As was argued in section 5 of this paper, the Constitution directs that Uganda should follow self-sufficiency (as opposed to self-reliance) as the country's main strategy for ensuring food security. Policy actions based on self-sufficiency as a food security strategy focus on ensuring sufficient household and national food production and establishing food reserves for storage among other

180 Ibid. See also Musiime, E., et al (2005), *Organic Agriculture in Uganda: The Need for a Coherent Policy Framework*, ACODE Policy Research Series, No.11, Kampala.

181 Supra note 105, Section 4.1, p.26.

182 Ibid, Section 3.5, p.25.

183 Ibid.

184 Supra note 105, Sections 4.3 and 4.5.

strategies.[185] In this regard, the Constitution requires the state to take appropriate steps not only to encourage people to grow and store adequate food, but also to establish national food reserves.[186]

> Government's market-based approach to food security is inconsistent with both the Constitution and the Uganda Food and Nutrition Policy.

Contrary to the Constitution and the UFNP which, as a major strategy for ensuring food supply and accessibility, also provides for establishing and maintaining food reserves at household, sub-county, district, regional and national levels,[187] the PMA explicitly states that "government will not adopt any policy to accumulate such stocks unless and until careful studies in Uganda have determined their efficacy."[188] According to the PMA, publicly held food reserves are very expensive[189] and establishing them as one of the strategic measures for increasing food security needs cautious consideration as "it would mark a major retreat from the successful liberalisation programme of the past decade."[190] In fact, the PMA's position that Uganda will not adopt a policy on establishing reserves also seems to be inconsistent with Government's commitments under the treaty establishing the EAC. As pointed out in section 4.3 of this paper, under the treaty establishing the EAC, member countries including Uganda agreed to initiate and maintain strategic food reserves.

It is important to recall that the PMA was adopted in 2000, hardly five years after the promulgation of Uganda's Constitution and one year after the adoption of the treaty establishing the EAC. In fact, the process of formulation of the PMA started sometime around 1995, when the country had just adopted its Constitution. Ideally, one would have expected the PMA, and indeed all other Government policies and legal instruments, to put into effect the constitutional aspirations. Unfortunately, the PMA instead contradicts the Constitution on the issue of Government's main strategy for guaranteeing food security. While it is appreciated that Government policies should not be static, but should evolve to address emerging policy challenges, good public policy-making requires formulation of policies that can stand the test of time. That Government's policy thinking on the main strategy to ensure food security would fundamentally change (as highlighted above) in hardly five years is so telling in terms of how uncertain Government is about the necessary policy measures required to improve the country's agricultural production and food security.

185 Deb, U., et al (2009), *Rethinking Food Security Strategy: Self-Sufficiency or Self-Reliance*, UK Department for International Development, p.1.

186 See para. XXII of the National Objectives and Directive Principles of State Policy.

187 Supra note 106, Section 3.1.3.

188 Supra note 105, p.36.

189 Ibid.

190 Ibid.

Apart from being inconsistent with the Constitution, the PMA market-based approach to food security is also inconsistent with the UFNP approach to food security. The UFNP, as Uganda's major policy framework governing issues of food and nutrition security, promotes the rights-based approach to food security. Contrary to the market-based approach, which calls for limited state intervention in ensuring food security, a rights-based approach to food security emphasises Government obligations – rooted in domestic constitutions and international human rights conventions– to ensure that people are free from hunger and that they have sustainable access to adequate and nutritious food.[191] The first guiding principle of the UFNP thus states that "adequate food and nutrition is a human right."[192] In this regard, the UFNP puts emphasis on Uganda meeting its national and international obligations as set out in national laws, international conventions, treaties and resolutions on the right to food.[193] The UFNP also emphatically states that "in the planning, budgeting and implementation of the policy, a Rights-Based Approach, will be adopted to promote and protect the right to adequate food and nutrition and ensure participation of the rights' holder and accountability of duty bearers."[194] It is thus clear that there is apparent contradiction between Uganda's main agri-food policy frameworks on the issue of approach to food security. Again, the fact that the UFNP which was adopted in 2003, three years after the adoption of the PMA, advances another approach to food security altogether from the PMA market-based approach, is testimony that, as a country, Uganda seems not to be sure of the policy direction to take in ensuring food security for its citizenry. This uncertainty and policy inconsistency undermine development efforts aimed at improving the country's food and nutrition security situation.

Given Uganda's current circumstances, suffice it to say that between the market-based approach and the rights-based approach, the latter remains a better strategy for guaranteeing food security for the people in Uganda. Four reasons suffice to support this conclusion. First, despite Government's efforts in fighting poverty, many Ugandans are still poor. In 2009/10, for instance, nearly 7.5 million Ugandans were classified as poor.[195] This means that very many Ugandans lack the requisite productive resources and purchasing power to meet their food requirements through the market. Second, Uganda's local markets and marketing system are very poorly organised and are constrained by many factors including: the poor road networks, poor market infrastructure, lack of sufficient and up-to date market information and poor and inadequate agro-processing facilities. Unless and until these challenges are addressed, the market cannot be over-relied on to ensure household and national food security.

191 Narula, S., (2006), *The Right to Food: Holding Global Actors Accountable in International Law*, Centre for Human Rights and Global Justice Working Paper No.7, p.6.

192 Supra note 103, Section 2.3.1.

193 Ibid, Section 2.3.8.

194 Ibid, Section 2.3.9.

195 UBOS (2011), supra note 5.

Third, the market is associated with many risks and uncertainties which make it risky for poor countries like Uganda to over-rely on it in terms of ensuring household and national food security. This was demonstrated during the 2008-9 food crisis, which led to the soaring of food prices. Many Ugandans went hungry because they could not afford the market food prices. In the meantime, a lot of food was being sold to neighbouring countries like Southern Sudan and Kenya because traders from those countries offered better prices.[196] Many farmers, particularly in the eastern and northern parts of the country, sold their produce before the harvest period.[197] Yet even though they got better prices/income from selling their produce, that income did not guarantee their household, community and national food security. If there is anything that Uganda should have learnt from this and other food crises, it should be that the market-based approach to food security cannot be relied on to guarantee food security in the country. Finally, the rights-based approach is so empowering to the people (the rights-holders) in terms of holding Governments accountable. Importantly, when people are not able to have adequate food, the state has the obligation to provide for them. Otherwise, Government must take steps to ensure that all people have the means to meet their food requirements.

196 See IRIN (2009), UGANDA: Food Crisis Feared as subsistence farmers sell produce. Available at http://www.irinnews.org/Report.aspx?ReportId=84915 [Accessed on 20 February 2011].

197 Ibid.

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CONCLUSION

Over the years, Uganda has made remarkable progress in developing and putting in place various agri-food system policies and policy frameworks aimed at stimulating growth in the agriculture sector, improving food security and ensuring the sustainable use and management of ENR. On the whole, these policies and policy frameworks are failing to bring about the desired change in terms of improving agricultural production and food security.

Among other things, this paper has identified Uganda's major agri-food system policies and policy frameworks and highlighted some of the problematic issues with them. The paper has also offered some insights on how to address these issues. It is hoped that in the quest for a robust agri-food system in Uganda, the issues raised, observations made and reforms proposed in this paper will be given the necessary consideration by Government and other stakeholders.

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