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## ASSESSMENT OF EXISTING POLICY AND LEGAL FRAMEWORK FOR BANANA VALUE CHAIN DEVELOPMENT IN UGANDA

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### ABSTRACT

*Although there is a high dependence on bananas for food and income, the banana subsector remains largely underdeveloped in Uganda. This study aims to assess the enabling environment in the banana subsector by ascertaining and examining the existing policy and legal frameworks for the development of the banana value chain in Uganda. A combination of survey, focus group discussions, key informant interviews and desk review data collection techniques were employed for the study. Analysis of the extant policy framework reveals that despite the absence of a specific policy for the banana subsector, there is a legal institutional framework in operation although only on a limited scale as the responsible institutions are weak. Adequate financing and human capital capacity development are required in order to empower the existing institutions towards promotion of the banana value chain. The paper concludes that a policy specifically geared towards the banana subsector is a prerequisite for a comprehensive strategic plan in the development of the Ugandan banana value chain.*

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**Keywords:** Banana, Value chain, Policy, Institutions, Uganda.

### Contribution/ Originality

The paper's primary contribution is finding that there is need to formulate a comprehensive strategic plan geared towards mapping the current situation in order to tap the existing opportunities in shaping the banana sub-sector development in Uganda.

## 1. INTRODUCTION

The dominance of agriculture sector in developing economies such as Uganda has increasingly necessitated the formulation of policies aimed at the sector development. In Uganda, the National

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Agriculture Policy (NAP) was developed as a basis for implementation of the Constitution of the Republic of Uganda under objective XI (ii) “to stimulate agricultural, industrial, technological and scientific development by adopting appropriate policies and enactment of enabling legislation” and objective XXII (a) “to take appropriate steps to encourage people to grow and store adequate food” (Republic of Uganda, 1995). In line with these constitutional objectives, the government’s vision of Prosperity For All (PFA) under the guidance of the National Development Plan (NDP) which encompasses agricultural development as a vital driver of economic growth plays a crucial role in the modernization of agriculture. The operationalization of NAP is guided by the Agriculture Sector Development Strategies and Investment Plans [DSIP] (RoU, 2013a). In order to achieve the set out objectives in the agriculture sector, value chain approach is deemed vital so as to make the development process as inclusive as possible.

The rise of global value chains (GVCs) in a variety of industries covering both goods and services has been a salient feature of the world economy over recent years (Miroudot *et al.*, 2009). Increased participation by developing countries, particularly in East Asia, stands out strongly in the data. GVCs are characterized by the functional and spatial fragmentation of activities in a firm’s value chain, including production, distribution, sales and marketing, research and development, innovation, and other functions (De Backer and Yamano, 2012).

There is evidence of increasing attention to Global value chain (GVC) involvement and development in East Africa particularly in Uganda (World Bank, 2010). The NDP 2010/11-2014/15, for instance, has a key intervention in supporting and strengthening key product value chains with an aim of gaining access to high value markets as well as to penetrate global value chains through Public Private Partnerships and inter-government sectoral collaboration. The NDP document specifies the following products as vital in agricultural value chains development and from the economy’s perspective; dairy products and poultry, beef, fish products, coffee, floricultural and horticultural products, maize, beans, cassava, processed bananas and processed mineral products (RoU, 2010c). Value chain development in the Ugandan context, however, is largely seen through the lens of domestic value chain development.

As a vital commodity identified under NDP, bananas have been in production in Uganda from 500BC although later discoveries have shown that banana presence could have been in the country for at least 5000 years (Robertshaw, 2006). Whichever the case, the dates indicate that bananas have long been produced in Uganda. Researchers have estimated 87 endemic banana species to be in existence in Uganda (Edmeades *et al.*, 2006) and well over 200 East African Matooke varieties within Uganda, Tanzania, Congo and Rwanda as documented by Bioersivity International (Kabahenda and Kapiriri, 2010). As such, Uganda is currently one of the world leaders in banana production, accounting for approximately 10% of total global production (Faostat, 2006). The country produced 4,300,000 tons in 2008, 4,522,000 tons in 2009, 4,694,000 tons in 2010 and 4,895,000 tons in 2011 (Uganda Bureau of Statistics-UBOS, 2012). With approximately 75% of the country’s farmers growing bananas on 40% of the total available arable land (Paepard, 2012) banana producing households are almost entirely dependent on bananas for both food and income (Ssali, 2008). Accordingly, bananas constitute up to 70% of the Ugandan family food basket (Bujoreanu, 2013).

The aforementioned statistics highlight both the dependency on and importance of bananas in Uganda. Based on this, the development of the banana subsector would have an impact on the wellbeing and livelihoods of many people. As a result of the importance of bananas to the agricultural sector of the economy, the development of the value chain ought to be handled strategically through a robust policy framework that can ensure the maximization of the possible benefits derived from the subsector. This would serve as a guide in directing how support towards the subsector would be most effective and addressing important issues related to the subsector.

The lack of adequate data for GVC analysis makes it difficult to assess the extent to which Ugandan producers are integrated in global value chains. The most recent available input-output table for Uganda dates back to 1991 and it is reasonable to assume that the structure of the Ugandan economy has changed significantly since then. This necessitates policy assessment of the banana value chain towards identifying the interlink gaps among various value chain actors which could form a basis for improved integration of the banana sub-sector into the GVC.

Therefore, this study is aimed at assessing the existing policy and legal framework for banana value chain development in Uganda as a way of identifying potential avenues for improving the contribution of the banana subsector to the economy. In order to address this objective three guiding research questions were used; is there an existing policy framework for the banana subsector in Uganda? Are there policy gaps in the banana subsector? What is the future of banana subsector within the existing policy framework?

## 2. METHODOLOGY

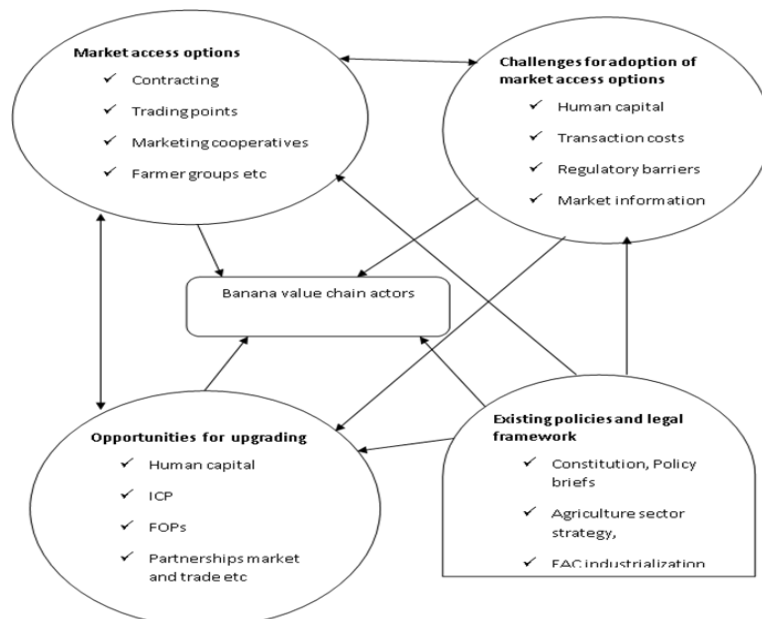
This study was carried out across Uganda. A survey was conducted in Mbale district located in Eastern Uganda, and Kabale and Mbarara districts in South Western region. The areas were selected based on their differences in banana production and market characteristics. Mbarara district is characterized by high banana production whereas Kabale and Mbale are characterized by medium and low production levels respectively. Key informant interviews were conducted within the institutions that participate in the banana subsector. In addition, desk review of available policy related literature was carried out in order to understand the past and present situation of the subsector. The survey, focus group discussions, key informant interviews and desk reviews were crucial in identifying policy gaps and assessing the future prospects of the banana subsector.

Semi structured questionnaires for the survey and key informant interview schedules were used as tools for data collection. On one hand, the study employed a multi stage sampling technique for the survey where in the first stage three districts (Kabale, Mbale and Mbarara) were purposively selected since they had varying characteristics in terms of production, marketing and value chain development so as to ensure representativeness of the sample for Uganda. In the second stage, two sub-counties and two parishes from each sub-county i.e four parishes per district were purposively selected while in the third stage a total of 20 value chain actors were selected per parish using simple random sampling. Therefore, a total of 240 value chain actors were involved in the study. On the other hand, key informant interviews were conducted based on referrals while a desk review was carried out via internet search engines (such as google) and library materials review in NARO-Kawanda.

Data from the survey was analysed through descriptive techniques (means, percentages and frequencies) using Microsoft Excel and Statistical Packages for Social Sciences (SPSS) while key informant interviews data was used to enrich the survey and desk review data.

### 2.1. Theories for Policy and Legal Framework Analysis

The study was guided by major policy analysis tools and functions. There are five methods of policy analysis which form the minimal methodological equipment for environmental, economic and social studies. These include but not limited to: • Reconstruction of policy theory, • Stakeholder analysis, • Impact assessment, • Cost-benefit analysis, • Discourse analysis. However, the paper considers impact assessment, discourse analysis and review of stakeholders during the study to establish the existing policies and gaps for banana value chain development. Some key guiding questions along five major thematic areas were developed to guide the study data collection, analysis and presentation of the results. (i) Policy content: Some examples of questions are: What are the policy objectives? (ii) Policy process: e.g. what is the influence of non-state actors and other agriculture actors on banana value chain activities promotion agenda-setting? and how have policy processes evolved over time? (iii) Policy organization: e.g. which policy domains are involved in the issue of sustainable development? And how is the implementation organized in districts (iii) Policy effects: e.g. has the policy resulted in the realization of its objectives? Are there any gaps? Do stakeholders evaluate the policy effects similarly or not? And what explains success or failure of the policy under study? (iv) Policy context: e.g. how is the policy content affected by political, economic, and cultural developments? (Runhaar *et al.*, 2006; Ministry of Forestry, 2010). The above thematic areas were analyzed based on the study conceptual framework adopted Figure 1. The past and current legal frameworks and policy gaps identified informed the future outlook of the banana value chain.



### 3. RESULTS AND DISCUSSIONS

#### 3.1. History of Agricultural Policy

In order to have a deeper understanding of the banana subsector related policies, the study reviewed the governance and agricultural policies in Uganda. The study established that during the colonial period and slightly after independence there existed an administrative institution in Uganda under the Mutongole chief; village chief. In other regions of Uganda they were known as the Muluka, the Gombolola or the Saza Chiefs but were the same. The system was keen on maintaining the links between the grassroots and the national level. To ensure implementation and effectiveness of government programs, health and agricultural assistants worked with the chief and a sub-county *askari* (police). Under this collection of experts, government policies would be communicated to the citizens with demonstrations on the use of newly introduced facilities in communities as well as follow up visits to ensure continuity. Inspections and taking action were at the center of this system in which assessments would be carried out on key areas in a household such as the pit latrine, main house, kitchen, drying racks, gardens, granaries and court yard as a measure of ensuring compliance to government directives, environmental management, maintaining hygiene and food security (Mushega, 2011; Bategeka *et al.*, 2013). The chief was the overall overseer of agriculture and agriculture related projects implementation. Failure to comply with the communicated directives was treated as defiance to the system thus the head of such a household would be taken to task to comply, warned, arrested and sometimes fined for negligence.

The local government system replaced the Mutongole system as a move towards democratic representation. In this regard, Chapter 11 of the Uganda constitution coupled with an Act of Parliament substantially gives local government an important role in the decentralization of services to the Ugandan people. The local governments set ups are in close proximity to the people thus are bestowed with responsibilities of providing basic services to the people including agricultural services. These governments are empowered through tax collection in their jurisdictions and are provided with funds for execution of government projects and or translation of central government policies into benefits for the local people (Bitarabehe, 2008). The local governments are empowered with recruitment roles for the local manpower needs and the supervisory role for the nationally recruited personnel. This gives these governments a basis for addressing the local problems and relaying the same to the central government. The local augmentation of local governments means they are in charge of agricultural activities in the areas they operate in, including the banana subsector. Compared to the local government system, the Mutongole system although seen as coercive, was more effective than its successor. Though both were tasked with agricultural activities in the sub county, the local governments seem to have been ineffective with the only interest being preservations of office tenure coupled with fear for reelection if the communities were pressured to undertake some directives (Bategeka *et al.*, 2013). The current system is empowered to formulate and implement by-laws and ordinances, however even when formulated these laws are hardly implemented. Evidently, the chief system's mandate was limited to implementation of agricultural directives compared to local government which is highly empowered to collect and allocate revenue, formulate by-laws and implement them as well as the laws set by the national government. As such the later system would be expected to perform

better compared to the former although this is not the case. The chief system would be key in promoting enterprise (including agriculture) development and identifying the developmental aspects at the grassroots and relaying such information to the national government. As such the today's banana subsector would have been more efficient under the Mutongole system.

Key priority areas such as the banana cottage industries remain disconnected from the local governments' support which would otherwise contribute to the burgeoning of the local government economies. Despite being economically useful, the bananas and banana 'waste' have mostly been left to rot away, contributing to the garbage menace in the local governments. Further under the Markets Act CAP 94 in the laws of Uganda, local authorities are mandated to develop and maintain markets in their jurisdiction. Markets being points of business remains highly disorganized, underdeveloped and undermanaged with the majority of market infrastructure being quite underdeveloped. This contributes to product losses for the traders and fees for local authorities (Uganda Law Reform Commission, 2013). Perhaps the banana subsector would be more successful today if the former Mutongole system was retained for enforcement of key livelihood government investments.

### 3.2. Agricultural Policy Framework Situation (1986 to Date)

Agricultural policy in Uganda has undergone transformation over the years since the National Resistance Movement (NRM) Government took office in 1986. At the onset, the national agricultural policy framework in Uganda was set towards restoration of traditional exports such as coffee, tea, tobacco and cotton to increase export earnings, develop non-traditional exports like fish and flowers, and eliminating physical, technical and institutional barriers (RoU, 2005).

In order to achieve these objectives in 1989 the government formulated and adopted a policy agenda centered on areas such as agricultural pricing and incentives, trade liberalization and promotion, restructuring of marketing boards, financial rehabilitation of cooperative unions, and strengthening agricultural research and extension services. The adoption of these policies enabled the agricultural sector to grow at approximately 5% between 1986 and 1999 (RoU, 2005; UWS Agro-Diversity Project, 2006).

Today, the National Agricultural Research Policy, National Agricultural Advisory Services (NAADS), financial policies and Dairy, Beef and Fisheries sub-sector policies have been developed in order to modernize agriculture in Uganda. The National Agricultural Research Policy is based on the idea of responding to market opportunities and empowering agricultural stakeholders. It also decentralizes agricultural research and services as well as the main streams gender issues. The policy enabled the establishment of National Agricultural Research Organization (NARO) to implement the policy (UWS A-DP, 2006).

The assessment of policy and legal frameworks for the banana value chain development established no specific policy for promotion of the banana sector in Uganda. However, it was established that a framework of government institutions have been set up aimed at the promotion of the agriculture sector activities such as banana value chain activities. From the study it was evident that banana value chain actors were unaware of any legal frameworks that support the banana subsector as well as policy provisions. For instance, among the processors interviewed 78% were

unaware of any policy that directly supports the banana subsector. The other 22% indicated that there existed a banana legal framework but they could not specify which. This implied that processors were not aware of any law or policies in regard to the banana value chain. Recently, the government set up a pilot project targeting the banana subsector; Presidential Initiative on Banana Industrial Development which is a promising indication of the government willingness to promote the subsector in unlocking its potential.

Research and advisory service providers are key pillars in any economy across the world. In Uganda, a number of research and advisory service providers (both private and public entities) are involved in the banana value chain. For instance, Excel Hort Consult Ltd is involved in agribusiness value chain development, National Agricultural Advisory Services (NAADS) is involved in provision of farmer led extension services, National Agricultural Research Organization (NARO) is responsible for coordination of all agricultural research activities in Uganda while International Fund for Agricultural Development (IFAD) is involved in enabling the rural poor to overcome poverty by initiating development conscious agricultural projects.

Over the years since the National Resistance Movement (NRM) took over the governance of the country, reforms have been initiated and implemented in the agricultural sector in Uganda. The reforms picked momentum in the 1990s where in 1992 Uganda took on World Bank driven structural adjustment policies through widespread liberalization like many other African countries. At this time Uganda liberalized agricultural marketing by dismantling Coffee and Lint Marketing Boards, a significant crop in the Uganda agricultural sector. This was followed by setting up of autonomous agencies aimed at the promotion of specific agricultural products, essentially revising the rules governing production, marketing and general distribution of agricultural output. In order to ensure the government concentrated on the policy side, institutions like the Plan for Modernization of Agriculture (PMA) were set up with the aim of plugging the operational gaps left by the government. PMA was set up on seven guiding principles; research and technology development, agricultural advisory services, agricultural education, rural finance services, marketing and agro processing, sustainable use and management of natural resources and physical infrastructure. PMA was founded on a business driven perception of agriculture thus justifying elimination of subsidies. Ideally, farmers would earn enough income through demand and supply price determination thus being able to meet their food needs (Bategeka *et al.*, 2013).

The efforts towards agricultural transformation in Uganda have at times been thwarted by inadequate consciousness of policies, partial implementation and politics. Accordingly, of the seven principles of the PMA, only the agricultural advisory services pillar was established under an Act of Parliament as National Agricultural Advisory Services (NAADS) Act. From the formulation and implementation of the PMA, the Rural Development Strategy (RDS) was introduced with the aim of advocating for proactive government, this initiative however was rather short lived, lasting from 2005-2007. The RDS was meant to upscale focus on increasing farm productivity, increasing household output and adding value and ensuring a stable market for selected agricultural goods as had been outlined in PMA. Around the same time, another strategy -Prosperity for All (PFA) - was introduced but was largely ineffective as it was primarily administrative rhetoric and a political gimmick (Bahiigwa, 2012). PFA was aimed at improving the lives of Ugandans through higher



incomes, better nutrition, and improved access to health, education, water and infrastructure (Kabahenda and Kapiriri, 2010). The rural folk would mainly benefit through agricultural development.

Reforms in the agricultural sector have continued over the years with the ultimate goal of agricultural transformation from a highly subsistence structure to commercialized (agribusiness) geared towards more benefits to the rural populace and the cohort of agricultural value chain actors. After the introduction of some reforms, there have been instances of growth and improvement in the agricultural sector. However, Bategeka *et al.* (2013) note that over the last decade progress in the agricultural sector has slowed down in comparison to the industry and services sectors. The services sector growth has been at the foreground of advancement with growth of 12.6% from 2002-2009, followed by industry growing at 7.9% compared to agriculture's 1.7% in the same period (RoU, 2011; Bategeka *et al.*, 2013). In 2010-2011, the services and industry sectors grew almost at par at 8% and 7.5% respectively compared to agriculture's 0.9%. The agriculture sector growth improved to 3% in 2011-2012 (UBOS, 2012).

Amid the increasing debate on agribusiness and rural poverty, the government of Uganda launched a 30 year National Development Plan with the intention of accelerating private investment as well as promoting competitiveness in the economy. In order to achieve this, the Uganda government highlighted deliberate target areas for improvement including the agriculture sector, infrastructure and private-public partnerships as a way of linking producers to the market. In addition to this the Local Government Sector Investment Plan and the Rural Financial Services Strategy were also launched as a basis for rural development (RoU, 2013b; RoU, 2013c).

Notably, state and non-state institutions like IFAD, FAO have invested in the agriculture sector although the results may not be fully visible owing to the resources required to turn around a major sector like agriculture in a developing country. As a result adoption of agricultural technologies and market access in Uganda is limited although promotion of agriculture has been at the core of national development (UBOS, 2007). Farmers who initially adopt agricultural technology end up dropping it despite the benefits associated with them (Kasirye, 2013) especially in instances where technology promoting partners withdraw from such initiatives. The use of outdated technologies lowers the likely benefits thereby many households end up in poverty traps. In order to promote commercial agriculture, primary producers need to be empowered as such banana subsector is one such avenue that needs to be promoted. However as noted by RoU (2010a; 2010b) the agricultural sector in Uganda is faced with numerous challenges among which are low production and productivity, low value addition and limited market access, weak implementation of laws and policies as well as weak public agricultural institutions. These are critical areas which present (like DSIP) and future policies need to actively address.

National Agricultural Advisory Services (NAADS) was the most widespread government related service provider across the three districts surveyed (Mbale, Kabale and Mbarara). The research findings showed that NAADS mostly specialized in extension service provision, planting materials (seeds) provision and capacity building among farmers. However, the study indicated that NAADS is faced with inadequate facilitation, inefficient systems for monitoring and evaluation and low participation by farmers. National Agricultural Research Organization (NARO) presence was

also established through Zonal Agricultural Research and Development Institutes (ZARDIs) such as Mbarara zonal offices (formerly stock farm). Other operational ZARDIs include Abii in Arua district, Kyembogo in Kabarole district, Ikulwe in Iganga district, Nabuin in Moroto district, Mukono in Mukono district, Bulindi in Hoima district, Kachwekano in Kabale district and Serere in Soroti district. In addition, academic institutions are also involved in banana research; institutions such as Mbarara University of Science and Technology, Makerere University and Kyambogo University in Uganda.

Further, Uganda is a signatory to the Comprehensive African Agriculture Development Programme (CAADP) Compact which is a growth-oriented agricultural development agenda, aimed at increasing agriculture growth rates to six percent annually by allocating at least 10 percent of the national budget towards agriculture in order to create the wealth needed for rural communities and households in Africa to prosper. To achieve this goal, CAADP focuses its interventions in four key pillars to achieve measurable outcomes: (a) Extending the area under sustainable land management and reliable water control systems; (b) Improving rural infrastructure and trade-related capacities for market access; (c) Increasing food supply, reducing hunger, and improving responses to food emergency crises; and (d) Improving agriculture research, technology dissemination and adoption.

In addition, crosscutting issues common across the four pillars targeted for interventions include capacity strengthening for agribusiness; academic and professional training; and improving access to information for agricultural strategy formulation (NEPAD, 2010).

The summarized version of the various policy and legal framework related to the banana sub-sector in Uganda is as shown in Table 1:

Table-1. Banana sub-sector related policy and legal framework summary for Uganda

Policy/Legal framework	Description
Plan for Modernization of Agriculture-PMA (2000 - 2008)	<p>Initiated in 2000, PMA was intended to eradicate poverty by transforming subsistence agriculture to commercial farming. This is partly achieved through:</p> <ul style="list-style-type: none"> <li>• Enhanced dissemination and adoption of improved farming practices and technologies</li> <li>• Diversified agricultural sector with higher value products that attract higher demand</li> <li>• Promotion of market-oriented agriculture (local and export) that also ensures food security in all households</li> <li>• Lowering the costs of production and marketing in order to make agricultural sector competitive</li> </ul> <p>PMA was instrumental in the formation of NAADS and NARO.</p>
The Rural Development Strategy (RDS) 2005	<p>The RDS was an initiative by the Ministry of Finance, Planning and Economic Development (MoFPED) and was formulated to address weaknesses in Poverty Eradication Action Plan (PEAP) regarding:</p> <ul style="list-style-type: none"> <li>• Increasing farm productivity of selected commodities;</li> </ul>

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	<ul style="list-style-type: none"> <li>• increasing household output of selected agricultural products; and</li> <li>• adding value and ensuring a stable market for agricultural products</li> </ul> <p>All these were already under PMA but the RDS was intended to give these areas more focus.</p>
<p>National Agricultural Advisory Services Act 2001</p>	<p>NAADS was established through an Act of Parliament as one of the seven pillars of PMA. It was designed essentially to address issues of productivity and expansion of agriculture with an aim of eradicating poverty. NAADS was envisioned to “increase farmer access to information, knowledge and technology, through effective, efficient, sustainable and decentralized extension with increasing private sector involvement in line with government policy”. NAADS functions are to:</p> <ul style="list-style-type: none"> <li>• To promote food security, nutrition and household incomes through increased productivity and market oriented farming;</li> <li>• To empower all farmers to access and utilize contracted agricultural advisory services;</li> <li>• To promote farmer groups to develop capacity to manage farming enterprises;</li> <li>• To create options for financing and delivery of agricultural advice for the different types of farmers but with emphasis on subsistence farmers, particularly women, youth and people with disabilities;</li> <li>• To gradually shift from public delivery to private delivery of agricultural advice;</li> <li>• To develop private sector agricultural advisory delivery capacity and systems and assure quality of advice;</li> <li>• To catalyse the participation of the private sector to fund agricultural advisory services.</li> </ul>
<p>NARO Act 1992/NARS ACT 2005</p>	<p>Was established through an Act of Parliament enacted on 21<sup>st</sup> November 2005. National Agricultural Research Organization (NARO) is the overall institution for guidance and coordination of all agricultural research activities in Uganda.</p> <p>NARO’s mission is to generate, adopt and disseminate appropriate and demand-driven technologies, knowledge and information through an effective, efficient, sustainable, decentralized and co-ordinate agricultural research system.</p> <p>Research and technology outputs are to be adapted and disseminated through Zonal Agricultural Research and Development Institutes (ZARDI) located in each of the 12 agro-ecological zones</p> <p>The NARO Act further provide for the formation of four specified Public Agricultural Research Institutes (PARIs) and each institute is in charge of specific commodities</p>
<p>Prosperity for All (PFA)</p>	<p>The National Resistance Movement (NRM)’s 2006 election Manifesto contains the vision of “Prosperity for all-PFA”. PFA’s focus is hinged on higher incomes, better nutrition,</p>

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	<p>and improved access to services such as health, education, water, and reliable physical infrastructure. The vision is embedded in the public interventions at local levels and The new Development Strategy and Investment Plan of 2010 (DSIP). Several attempts in the past to avail cash transfers to identified beneficiary in the Uganda population have not yielded much. Under DSIP, PFA is a main result area with renewed strategies to ensure its success. However, politics have played a fair share in the minimal success of PFA.</p>
<p>The new Development Strategy and Investment Plan -DSIP</p>	<p>DSIP is a developmental plan that ‘consolidates and harmonizes all parallel policy frameworks in the agricultural sector’. Some of the immediate objectives of the DSIP include:</p> <ul style="list-style-type: none"> <li>• Factor productivity (land, labour, capital) in crops, livestock, and fisheries sustainably enhanced.</li> <li>• Markets for primary and secondary agricultural products within Uganda, the region and beyond developed and sustained</li> <li>• Favorable legal, policy and institutional frameworks that facilitate private sector expansion and increased profitability along the entire value chain developed</li> <li>• MAAIF and Agencies functioning as a modern, client-oriented organization within an innovative, accountable, support environment</li> </ul>
<p>Uganda National Development Plan-NDP (2010/11-2014/15)</p>	<p>Under the theme of “growth, economic and socio-economic transformation for prosperity”, NDP is a formulation of targeted interventions with a goal to attaining the national vision of transforming the country from peasant-based economy to a prosperous country within 30 years. The plan is hinged on the following objectives:</p> <ul style="list-style-type: none"> <li>• Increasing household incomes and promoting equity</li> <li>• Enhancing the availability and quality of gainful employment</li> <li>• Improving stock and quality of economic infrastructure</li> <li>• Increasing access to quality social services</li> <li>• Promoting science, technology, innovation and ICT to enhance competitiveness</li> <li>• Enhancing human capital development</li> <li>• Strengthening good governance, defence and security</li> <li>• Promoting sustainable population and the use of environmental and natural resources</li> </ul>
<p>East Africa Industrialization Strategy 2012-2032</p>	<p>Approved in 2011 and is currently under implementation. The strategy principles 5 and 6 emphasize the need for agricultural market development through transformation of the manufacturing sector, promotion of high value addition and product diversification based on comparative and competitive advantage of the region. Based on this, the banana subsector in</p>

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	<p>Uganda will potentially expand considering that most East African Community members (Kenya, Burundi and Rwanda) have a production-consumption deficit of banana.</p>
<p>CAADP Compact</p>	<p>Uganda is a signatory to the CAADP Compact since 2010.</p> <p>CAADP is a growth-oriented agricultural development agenda, aimed at increasing agriculture growth rates to six percent annually by allocating at least 10 percent of the national budget towards agriculture in order to create the wealth needed for rural communities and households in Africa to prosper. To achieve this goal, CAADP focuses its interventions in four key pillars to achieve measurable outcomes:</p> <p>Pillar 1: Extending the area under sustainable land management and reliable water control systems;</p> <p>Pillar 2: Improving rural infrastructure and trade-related capacities for market access;</p> <p>Pillar 3: Increasing food supply, reducing hunger, and improving responses to food emergency crises; and</p> <p>Pillar 4: Improving agriculture research, technology dissemination and adoption.</p> <p>Crosscutting issues common across the four pillars targeted for interventions include capacity strengthening for agribusiness; academic and professional training; and improving access to information for agricultural strategy formulation.</p> <p>DSIP is the CAADP implementing platform in Uganda.</p>
<p>Presidential Initiative on Banana Industrial Development (PIBID)</p>	<p>The PIBIP project focuses on researching ways to enhance production and marketing of banana flour and flour products. Its launch was began by the establishment of benchmarks for starting a rural based pilot banana processing Industry in Bushenyi. PIBID is guided by the following specific objectives:</p> <ul style="list-style-type: none"> <li>• To ensure sustainable processing of quality products by a start-up rural value addition enterprise through a Technology Business Incubator (TBI) framework for local &amp; global markets.</li> <li>• Capacity building for farmers in modern production technologies &amp; agronomic practices, so as to ensure sustainability of matooke production &amp; marketing in Bushenyi District for a banana processing industry.</li> <li>• Linking farmers/entrepreneurs to favourable micro-financing mechanisms to facilitate the enterprises.</li> <li>• Establishment of reliable supply chains that link farmers to more profitable market outlets with medium and large scale food processors/consumers.</li> <li>• Assessment of overall project impact on overall economic wealth, and livelihood of poor households in the district.</li> </ul>

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	<ul style="list-style-type: none"> <li>Transformation of the Bushenyi TBI into a Banana Industrial Research &amp; Development Centre (BIRDC).</li> <li>To build capacity for entrepreneurship training &amp; development through establishment of an Industrial Technology Park at Sanga, near Lake Mburo</li> </ul>
CAADP Compact	Uganda became a signatory in 2010 as a member of African Union. The compact entails commitment of at least 10 percent of the national budget towards agricultural sector promotion and ensuring a six percent growth of the sector.

Sources: (NEPAD, 2010; RoU, 2010a; 2010b; 2010c; RoU, 2013a)

In complementing government efforts in the promotion of the banana subsector, private and foreign supported institutions have been supporting the subsector (Table 2). These organizations are mostly involved in environmental conservation, agribusiness and agro-industry, savings and investment. However, these institutions are faced with constraints such as the expectation of handouts by participants of projects that are initiated hence limiting the expected benefits. The potential role of various actors reflected increased private sector investment in agriculture and engagement by the government under Public Private Partnership. A number of actors indicated that limited access to agriculture financing, poor infrastructure and uncoordinated efforts among actors as among major challenges in the banana value chain development.

**Table-2.** Non-state actor institutions engaged in banana value chain development in Uganda

Service provider	Mandate	Challenge (s)	Potential role in banana value chain development
World vision	To address causes and effects of poverty through development, relief and advocacy	The high number of potential beneficiaries	Banana value chain actors' groups' formation facilitation and funding for commercialization as a strategy for poverty eradication.
Excel Hort Consult Ltd	Providing services in agribusiness and agro-industry value chain development to local, regional and international organizations	Expectation of handouts. Short term duration for projects funding. Absence of government support in Excel led initiatives. Limited facilities for banana processing.	Agribusiness incubation and capacity development for a banana economy.
Community based organizations (CBOs)	Building self-reliance in the most vulnerable communities	Handouts expectations from targeted beneficiaries	Targeting banana enterprise development.
Tackling poverty together	To provide opportunities for youth participation in national development.	High rate of poverty in poverty areas	Awareness creation and capacity building of youth on economic potential of banana.
Africare	Expanding Food Security and Reducing Malnutrition for Rural Communities in Uganda	High poverty levels in some rural areas	Programs to promote banana productivity as a measure of ensuring food security
TRIAS	Helping individuals and groups to develop themselves to reduce poverty	Expectations of handouts by local communities	Setting up commercial villages by targeting the banana cottage industries
			<i>Continue</i>

Technoserve	Develops business solutions to poverty by linking people to information, capital and markets	Diseases devastation on banana plantations	Capacity building of farmers and other actors in value addition and linkage to markets
Alliance for a Green Revolution in Africa (AGRA)	Working towards achieving a food secure and prosperous Africa through the promotion of rapid, sustainable agricultural growth based on smallholder farmers	Designs of Agricultural <i>development</i> issues in African countries	Contribution in market access promotion of banana and its products
African Agricultural Technology Foundation (AATF)	Developing transgenic bananas resistant to Banana Xanthomonas Wilt (BXW)	The widespread nature of BXW and long process in research	On-farm support: Raising awareness in BXW and control trainings among banana producers
Association for strengthening Agricultural Research in Eastern and Central Africa (ASARECA)	Strengthening agricultural research and development	Resources availability in funding the increasing areas of importance in agriculture	Supporting the commercialization of innovations in the banana value chain
FARA-UniBRAIN	To promote agricultural innovation and improving tertiary agribusiness education in Africa by fostering linkages in university education, research and business in sustainable agriculture	Resources to cover the whole of Africa (has established incubator facilities in Ghana, Mali, Zambia, Uganda and Kenya)	Already supporting banana value chain development in Uganda through AfriBanana Products Ltd incubator

### 3.3. Policy Gaps and Future of Banana Subsector

From policy point of view there exists a gap in terms of land ownership and access especially in regard to women in Uganda although land laws proposes equality of men and women. The Uganda National Land Policy stresses redressing of historical injustices in protecting the land rights of groups or communities marginalized in terms of gender. Women dominate provision of labour in the banana subsector especially at the production level in households whereas ownership of banana plantations is quite low at barely 20%. This is an indicator that women are at the core of plantations management and would be quite instrumental in productivity improvement if they had ownership rights.

A further observation that constrained women participation in banana production was associated with limited rights to land hinged on the life of marriage. Gender mainstreaming in access and ownership of banana related resources is required considering women's huge contribution in the production process (65%) compared to low ownership (barely 20%) of banana plantation may be evaluated as a constraint in upgrading the banana value chain. The government of Uganda under the relevant institutions has fallen short of implementation of land laws even in instances where discriminative traditions, customs and practices against women in land access, use and ownership are outlawed. Transmission of land to men as inheritance continues to be practiced in disregard of the law leaving inheritance rights of women at the disposal of male relatives. The provisions of the Domestic Relations Law (Marriage and Divorce Bill 2013 and Administration of Muslim Personal Bill 2013) which provides for co-ownership of land are women friendly and are potentially beneficial in ensuring equal access to resources.

There was a tenuous link between input dealers and banana producers, the number of input dealers were very low signifying inefficient input markets. This context limits the accessibility of crucial inputs in the banana subsector and sometimes limits even the awareness that such inputs being in existence. The study noted minimal use of locally produced inputs such as farm yard manure, improved banana seedlings and agrochemicals. None of the respondent farmers reported to have used mineral fertilizers. This implies that a policy setup is required to address the non-utilization and or under-utilization of inputs such as inorganic inputs in banana production. The policy setup would be key in amending the current average usage of fertilizers which stands at 1 kg/ha against the internationally recommended 200 kg/ha (Bayite-Kasule, 2009) thereby closing the existing 140% banana production deficit per hectare.

The use of recycled planting materials and adoption of modern agricultural technology are also issues of policy concern. The study established that only one nursery of tissue culture seedlings had been established in the study area. Further, the increasing disease incidence in banana plantations (Black Sigatoka, Banana Bacterial Wilt) is also raising sustainability concerns for the banana subsector. Agricultural enterprises are generally associated with seasonality, high risk and in some instances absence of land ownership rights. Stemming from concerns over these constraints in Uganda, financial institutions are cautious in extending credit facilities to agricultural initiatives. In essence, financial service providers in most instances lack a method of recovering credit from farmers' thus declining partnerships with them. In instances where financial institutions were willing to provide credit facilities to farmers, the study established high interest lending rates so as to insure against the high risk involved, thus leaving farmers unable to take up such facilities.

This observed weak link between financial service providers' and producers, traders and processors could be bridged through farmer empowerment with the support of the government and the implementation of existing laws like the NAADS Act. Specifically, the NAADS act has the mandate to support farmers in a developmental capacity by establishing functional organizations (structured and operational institutions) that would ensure collective procurement and marketing, maintenance of up to date records and banking of proceeds. Through institutionalizing the producers and other value chain actors this would establish a reputation on the part of such associations which would be the basis of access to credit facilities. The NAADS Act is further mandated to aid farmers in creating options for financing and facilitating the participation of the private sector in financing agriculture. However, currently NAADS seems to be in-operational in this aspect.

This study discerned that there are existent value addition facilities such as Excel Hort Consult Ltd, Presidential Initiative on Banana Industrial Development (PIBID), Afri Banana Products Ltd, Bibilical wines and Centre for Textile Innovations (TEXFAD) although operating on a very small scale in the banana subsector. At present however there is a lack of proper documentation of banana cottage facilities in Uganda which makes it difficult to trace such initiatives for capacity building and potentially funding. These facilities remains very local in nature (village based) such that the people in the next locality/village may not even be aware of their existence. This limits such facilities from potential expansion through local supply of the product(s) from these facilities. From a policy perspective, there is a need to document/map these facilities in terms of capacity and



diversity of production. From such a perspective the information could be made available to the interested stakeholders/investors. This trend would be a good basis for the commercialization of cottage industries and upgrading of the banana value chain in Uganda. This would contribute to market development by supplying diverse banana products to the market as well as the banana subsector development.

The banana subsector in Uganda needs to be revisited by the stakeholders based on its importance in food and income aspects; strategic planning and execution is needed. This should be informed by the ever increasing challenges especially on the existing and likely effects of new diseases. As indicated by [Turvill \(2013\)](#) world banana supply is at risk due to the spread of fungal diseases. A preventive measure of spread has been issued in Costa Rica where the country's government declared the fungal disease a national emergency. With the disease being reported in Jordan and Mozambique as well as reports of increasing bugs in banana plantations, the reality is that the Uganda banana subsector is not risk free. This means that if the banana subsector is to remain stable or possibly improve, the relevant stakeholders such as government, non-state actors and producers among others need to adopt a theory of change approach by discarding the 'business as usual approach.' The Uganda banana subsector especially the NBRP should not operate in seclusion but should reach out to other research organizations across the world in the quest for solution for these disease challenges.

Recently, there has been an increasing debate on the suitability of Genetically Modified Organisms (GMOs) in agriculture. There has been no agreement on whether to launch GMOs across the world. However, it has been indicated that GMOs would be a basis for improved productivity, disease resistance, better nutrition and food security. In Uganda, there have been ongoing field trials on GMO bananas 'Super Banana' led by Queensland University of Technology. It is meant to enrich bananas with Vitamin A supplements using the banana gene phytoene synthase (PSY2a). However, the failure of the Golden Rice GMO project in Uganda hangs on the Super Banana trials ([Nature America, 2014](#)). Perhaps the GMO banana developers would learn from the experience. The success of Super Banana will be crucial in underpinning the negative perception of GMOs hence forming the future (sustainability) of the banana subsector.

The integration of the East African region and adoption of common policies such as the East Africa Industrialization Strategy 2012-2032 is a promissory step in promoting the utilization of raw materials sourced within the region and providing a market (over 135 million people) for the products ([Gache, 2012](#)).

The strategy principles 5 and 6 emphasize the need for agricultural market development through transformation of the manufacturing sector, promotion of high value addition and product diversification based on comparative and competitive advantage of the region ([Gache, 2012](#); [EAC, 2013](#)). The two guiding principles emphasize regional markets based on economic benefits extending across the region while targeting industrial value chains with widespread linkages. Based on this, the banana subsector in Uganda will potentially expand considering that most East African Community members (Kenya, Burundi and Rwanda) have a production-consumption deficit of banana.

#### 4. CONCLUSIONS AND RECOMMENDATIONS

The assessment of policy and legal frameworks for the banana value chain development established no specific policy for promotion of the banana sector in Uganda. However, it was established that a framework of government institutions have been set up aimed at the promotion of the agriculture sector activities such as banana value chain activities. From the study it was evident that banana value chain actors were unaware of existing policies and legal frameworks that support the banana subsector as well as policy provisions in agriculture sector generally.

There existing's policy gaps in agriculture sector development impacts on banana value chain development as one of the key sectors in the economy. The gaps identified cut across the downstream and upstream of the value chain in Uganda

The agriculture research and development strategies for Uganda needs to be revisited by the stakeholders based on its importance in food, income and employment creation aspects; strategic planning and implementation with key targets and resources is needed. This should be informed by the ever increasing challenges especially on the existing and likely effects of new diseases and population growth rate in the country.

Priority support by Uganda and other East Africa country governments towards implementation of common policies such as the East Africa Industrialization Strategy 2012-2032 is a promissory step in promoting the utilization of raw materials sourced within the region and providing a market (over 135 million people) for the products including banana.

A comprehensive strategic plan for banana sub-sector development need to be formulated by the government by building on existing policies in place, gaps identified and future outlook as well as taking into consideration the opportunities for Uganda's economy globally.

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#### REFERENCES

- Bahiigwa, G., 2012. Agricultural modernization experiences in Uganda: Expert group meeting on agriculture and rural transformation. Addis Ababa, Ethiopia: International Food Policy Research Institute.
- Bategeka, L., J. Kiiza and I. Kasirye, 2013. Institutional constraints to agriculture development in Uganda. Research Series No. 101. Uganda: Economic Policy Research Centre (EPRC).
- Bayite-Kasule, S., 2009. Inorganic fertilizer in Uganda—knowledge gaps, profitability, subsidy, and implications of a national policy. Kampala: IFPRI.
- Bitarabebo, J., 2008. The experience of Uganda – local government's role as a partner in the decentralization process to strengthen local development. Local Government Finance Commission Uganda. Available from [www.clgf.org.uk/userfiles/presentations/Bitarabebo\\_Uganda.doc](http://www.clgf.org.uk/userfiles/presentations/Bitarabebo_Uganda.doc) [Accessed 14th September 2013].

- Bujoreanu, L., 2013. The power of mobile: Saving Uganda's banana crop. Available from <http://blogs.worldbank.org/ic4d/the-power-of-mobile-saving-ugandas-banana-crop> [Accessed October 3rd 2013].
- De Backer, K. and N. Yamano, 2012. International comparative evidence on global value chains, OECD science, technology and industry Working Paper No. 2012/3.
- EAC, 2013. East African community industrialization strategy 2012-2032. East African Community. Available from [http://industrialization.eac.int/index.php?option=com\\_docman&task=doc\\_download&gid=130&Itemid=70](http://industrialization.eac.int/index.php?option=com_docman&task=doc_download&gid=130&Itemid=70) [Accessed August 20 2013].
- Edmeades, S., E. Kikulwe and M. Smale, 2006. Banana cultivars and planting material: A baseline assessment of banana management practices. Uganda Country Report. NARO/IFPRI/INBAP.
- Faostat, 2006. Statistics data base. Available from <http://faostat.fao.org> [Accessed 2nd February 2013].
- Gache, J., 2012. EAC industrialization strategy: Role of industry/academia linkages for development of competitive regional industrial value chains. East African Community (EAC). Available from [http://www.iucea.org/index.php?option=com\\_phocadownload&view=category&download=4:role-of-industry-academia-linkages-for-development-of-competitive-regional-industrial-value-chains&id=9:1st-east-african-higher-education-forum-2012](http://www.iucea.org/index.php?option=com_phocadownload&view=category&download=4:role-of-industry-academia-linkages-for-development-of-competitive-regional-industrial-value-chains&id=9:1st-east-african-higher-education-forum-2012) [Accessed 10th October 2013].
- Kabahenda, M. and M. Kapiriri, 2010. Analysing agricultural science and technology innovation systems: A case study of the banana sub-sector in Uganda. Technical Centre for Agricultural and Rural Cooperation (CTA) and Regional Universities Forum for Capacity Building in Agriculture (RUFORUM).
- Kasirye, I., 2013. Constraints to agricultural technology adoption in Uganda: Evidence from the 2005/06-2009/10 Uganda national panel survey. Research Series No. 102, Economic Policy Research Centre (EPRC). Available from [ageconsearch.umn.edu/bitstream/151979/2/series102.pdf](http://ageconsearch.umn.edu/bitstream/151979/2/series102.pdf) [Accessed 16th December 2013].
- Ministry of Forestry, 2010. Analyses of policies and economic incentives to improve local people participation in sustaining sandalwood resource in East Nusa Tenggara province. Consultancy Technical Report, ITTO PD 459/07 Rev.1 (F). Jakarta, Indonesia. Available from [http://www.itto.int/files/itto\\_project\\_db\\_input/2904/Technical/3.%20Book%20of%20Analyses%20of%20Policies%20and%20Economic%20Incentives.pdf](http://www.itto.int/files/itto_project_db_input/2904/Technical/3.%20Book%20of%20Analyses%20of%20Policies%20and%20Economic%20Incentives.pdf). [Accessed 12th April 2015].
- Miroudot, S., R. Lanz and A. Ragoussis, 2009. Trade in intermediate goods and services. OECD trade policy working paper No. 93, OECD.
- Mushega, N., 2011. Institutional reforms for sustainable development: Exploring options for improving coherence and synergies among institutions in Uganda. Kampala, Uganda. Available from [ageconsearch.umn.edu/bitstream/151979/2/series102.pdf](http://ageconsearch.umn.edu/bitstream/151979/2/series102.pdf) [Accessed 23rd October 2013].
- Nature America, 2014. Vitamin a super banana in human trials. Nature Biotechnology, 32(9): 857.
- NEPAD, 2010. Comprehensive African agriculture development programme. Available from <http://www.nepad.org/system/files/caadp.pdf> [Accessed 25th April 2015].
- Paepard, 2012. Matooke agribusiness incubator. Available from <http://paepard.blogspot.com/2012/10/matooke-agribusiness-incubator.html>.

- Republic of Uganda, 1995. Constitution of the republic of Uganda. Available from [http://www.statehouse.go.ug/sites/default/files/attachments/Constitution\\_1995.pdf](http://www.statehouse.go.ug/sites/default/files/attachments/Constitution_1995.pdf) [Accessed 3rd May 2013].
- Robertshaw, P., 2006. Africa's earliest bananas. San Bernadino: California State University, 59(5).
- RoU, 2005. Agricultural policies, Working Paper No. 18, Kampala, Uganda.
- RoU, 2010b. Vision 2040, Kampala, Uganda. Available from [npa.ug/wp-content/themes/npatheme/documents/vision2040.pdf](http://npa.ug/wp-content/themes/npatheme/documents/vision2040.pdf) [Accessed 16th December 2013].
- RoU, 2010a. Agriculture sector development strategy and investment plan: 2010/11-2014/15. Kampala: Ministry of Agriculture, Animal Industry and Fisheries.
- RoU, 2010c. National development plan 2010/11 - 2014/15. Available from <http://npa.ug/wp-content/themes/npatheme/documents/NDP2.pdf> [Accessed 10th September 2014].
- RoU, 2011. Statistical abstract 2011. Kampala, Uganda: Ministry of Agriculture, Animal Industry and Fisheries.
- RoU, 2013a. Agriculture sector development strategy and investment plan: 2010/11-2014/15. Available from <http://agriculture.go.ug/userfiles/Agricultural%20Sector%20Development%20Strategy%20and%20Investment%20Plan%28%29.pdf> [Accessed 16th May 2013].
- RoU, 2013b. Local government sector strategic plan (LGSSP) 2013-2023. Ministry of local government, plot 1 Pilkington Road, Kampala. Available from [https://molg.go.ug/mo/docs/2014/12/LGSSP\\_7\\_June\\_2013.pdf](https://molg.go.ug/mo/docs/2014/12/LGSSP_7_June_2013.pdf) [Accessed October 6th 2013].
- RoU, 2013c. Strategy for financial literacy in Uganda. Available from [https://www.bou.or.ug/opencms/bou/bou-downloads/Financial\\_Inclusion/Strategy-for-Financial-Literacy-in-Uganda\\_August-2013.pdf](https://www.bou.or.ug/opencms/bou/bou-downloads/Financial_Inclusion/Strategy-for-Financial-Literacy-in-Uganda_August-2013.pdf) [Accessed October 6th 2013].
- Runhaar, H., C. Dieperink and P. Driessen, 2006. Policy analysis for sustainable development: The toolbox for the environmental social scientist. *International Journal of Sustainability in Higher Education*, 7(1): 34-56.
- Ssali, M., 2008. Uganda: Bananas are on demand but farmers are not taking advantage, Kampala, Uganda. Available from [allafrica.com/stories/200810290319.html](http://allafrica.com/stories/200810290319.html) [Accessed 1st August 2013].
- Turvill, W., 2013. World's banana supply at risk from increasing number of bugs and spread of fungal disease. United Kingdom: Daily Mail.
- UBOS, 2007. Uganda national household survey, 2005/06: Report on the Agricultural Module. Kampala: UBOS.
- Uganda Bureau of Statistics-UBOS, 2012. 2012 statistical abstract, Kampala, Uganda. Available from [www.ubos.org/onlinefiles/uploads/ubos/.../2012StatisticalAbstract.pdf](http://www.ubos.org/onlinefiles/uploads/ubos/.../2012StatisticalAbstract.pdf) [Accessed 18th September 2013].
- Uganda Law Reform Commission, 2013. A report of the review of the markets act, cap 94 in Uganda. Uganda Law Reform Commission. Available from [www.ulrc.go.ug/ulrcsite/download/file/fid/63](http://www.ulrc.go.ug/ulrcsite/download/file/fid/63) [Accessed 3rd September 2013].
- UWS Agro-Diversity Project, 2006. A brief review of agricultural related policies in Uganda. Nature Uganda. Available from [www.uganda-agrobiodiversity.org/documents/Policy\\_background.doc](http://www.uganda-agrobiodiversity.org/documents/Policy_background.doc) [Accessed 7th August 2013].

World Bank, 2010. Building competitiveness in Africa's agriculture a guide to value chain concepts and applications. Available from <https://openknowledge.worldbank.org/bitstream/handle/10986/2401/524610PUB0AFR0101Official0Use0Only1.pdf?sequence=1> [Accessed 05th July 2015].

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