

AREA BASED COMMODITY CLUSTERS IN SELECTED PARTS OF UGANDA

1.0 Introduction

The National Agricultural Advisory Services (NAADS) underwent reforms at the beginning of FY 2014/15 and its mandate was refocused to providing agricultural inputs to farmers focusing on the following areas of mandate: Management of agricultural input distribution chains; Supporting strategic interventions for priority/strategic commodities including supporting the multiplication of planting and stocking materials; and, Supporting Agribusiness and value chain development focusing on the upper end of the chain.

In the last five years of implementing the NAADS/OWC programme interventions, substantial quantities of agricultural inputs have been distributed to the beneficiary farmers in the various district Local Governments as well other beneficial groups under strategic/special interventions. During the first two Financial years (FYs 2014/15 & 2015/16) the programme focused mostly on providing planting materials for a wide range of crop commodities and to livestock/stocking materials, with limited support for agricultural production machinery and value addition equipment.

During FY 2016/17 onwards special focus was given to provision of planting materials for supporting the key strategic commodities in line with the current Government strategy aimed at concentrating resources on strategic and priority areas to ensure greater impact on household incomes and national export earnings. The key strategic commodities included Tea, Fruits (Citrus/oranges, Mangoes Apples and Pineapples) and Cocoa.

During the same period increasing attention was given to strategic interventions in the area of agricultural production machinery and value addition equipment as well as water for production. The value addition and post-harvest interventions, albeit on a fairly limited scale, have focused on provision of milk coolers (dairy value chain), fruit processing equipment (mango, citrus and pineapple), milling equipment (maize, rice) and community level grain stores (Maize).

The Area Based Commodity Cluster Approach is aimed at opening the potential for increased production, stimulate industrialization and to increase exports of value added products in Uganda.

1.2 What is a Commodity Cluster?

A commodity cluster is made up of a number of districts near each other and serves to concentrate value chain actors (Input distributors, producers, traders, processors, transporters, financial service providers etc) with experience in the commodity, provide requisite infrastructure that, taken together provide opportunities for success in scaling up and development of the relevant commodity value chain.

Under the Commodity Cluster arrangement, distribution of plant seedlings and other related inputs is carried out only in clusters comprising a few districts around the emerging agro processing facilities. Only districts with the highest production potentials (agro-ecological, socio-economic) for the commodities are considered. This is to enable concentration of production around the industrial facilities.

A number of emerging industrial facilities already have producer cooperatives and farmer production groups around them (e.g Yumbe Mango Factory, Soroti Fruit Factory, Nwoya Fruit Factory). NAADS through the zonal coordinators and other development partners, works closely with the emerging cooperatives around the industrial/potential industrial areas. Where the cooperatives do not yet exist, efforts are made to develop farmer institutions and cooperatives.

1.3 Rationale for the development of a cluster approach to agricultural support in Uganda

Whereas the current support under the NAADS/OWC has stimulated the need to establish or expand agro-processing /value addition facilities in the different production areas, there is need to ensure sustainable value chain development and market linkages through establishment of agro-processing /value addition facilities in line with the Government's strategic direction for agro-industrialization. Thus the need for adopting a cluster approach for boosting production and productivity of the strategic commodities has become a strategic necessity. The adoption of a cluster approach to production of key commodities around industrial hubs eases delivery of services and development of the infrastructure thereby fostering the backward and forward linkages desired in agro industrial development. It also concentrates resources and avoid scattering of inputs and interventions to improve impact and visibility of the program.

2.0 Basic Principles of Clustering

The following set of principles shall guide the design and implementation of commodity clusters:

i) Addressing the strategic sector objectives:

This strategy is aimed at attaining the overall agriculture sector mission of increased productivity by farmers, transformation of subsistence farmers to enterprise farmers, transformation of the smallholder farmers into commercial farmers, increased food security and food availability, and increased agricultural exports.

To achieve this mission, the government of Uganda has earmarked funds for promoting commercial production of fruits and other strategic commodities by farmers as an important mechanism for moving the majority of the poor farmers into the monetary economy

ii) Promoting “clusterpreneurship”

The strategy will ensure development of “clusterpreneurs” – who will articulate the vision, and through their own actions instill enthusiasm for the vision among other potential cluster participants.

iii) Promoting inclusive participation and growth:

Social inclusion is a process by which efforts are made to ensure equal opportunities for all. It is the multi-dimensional process aimed at creating conditions which enable full and active participation of every member of the society and community in all aspects of life, including civic, social, economic, and political activities, as well as participation in decision making processes. Social inclusion also commits to the principle of 'subsidiarity', wherein, decision making should devolve to the lowest practicable level. The strategy sees small farmers and agribusiness, forge alliances with large firms/farms including processors without compromising support for small growers.

iv) Avoiding the one-size-fits-all approach:

The strategy aims to adapt each cluster development approach to the prevailing local or regional set of conditions. Each cluster will have a different set of factor conditions (e.g. natural, human and capital resources). For example, developing the apple value chain in the Mount Elgon sub-region might require slightly different interventions from those that will be used in developing the apple value chain in the Kigezi sub-region.

v) Involvement of local governance systems

An ABCC is by definition a tool to improve the economic dynamics of a given territory (Village, Sub-county, District, Region). The close link with local development makes almost compulsory the participation of local governments in the process of cluster inducement and development. A good practice identified is the collaboration and co-sharing of responsibilities of both central and local government agencies.

vi Ensuring Flexibility and institutional continuity:

A large degree of flexibility is required to continually adapt to events and changing priorities. Developing ABCCs is a long-term effort that requires strong institutional continuity. Building of strong institutions will ease coordination and promote continuity and sustainability of the intervention. In any case, it is crucial to avoid piecemeal public support to small and medium producers that does not enable a core group of producers to adopt a new enterprise or upgrade processes nor creates institutions to support them.

vii) Ensuring transparency and Participatory decision-making mechanisms and resource allocation.

Decision making and resource allocation within the ABCC should be as transparent and participatory as possible to all players including farmers. There is the risk that political pressure interferes with cluster processes and resource allocation resulting in the adoption of inadequate strategies. Groups of producers, multinational corporations and large local firms that control a large portion of cluster/sectoral wealth often have the means to influence public agricultural-cluster programs and policies on their benefit. In addition, external agents supporting ABCC initiatives (donors, international organizations and multinational companies) can also interfere with resource allocation. There are different ways to minimize the political pressure on spending decisions. One way to do so is to strengthen the collaboration between the public sector and a range of private-sector actors by the adoption of collective decision-making. Hence structures and institutions to ensure transparency and participatory decision making and resource allocation have to be put in place within each cluster.

3.0 Policy and Institutional Frameworks for the Cluster Programme

3.1 Operationalization of ABCC under NAADS framework

NAADS is mandated to manage inputs distribution chains and carry out agribusiness development focusing on the upper end of the value chain. In doing this NAADS works with a number of institutions such as Farmer Institutions, LG, Private Sector, NGOs,

Ministry of Finance Planning and Economic Development (MFPED) and MAAIF. Local governments are charged with the responsibility of implementing NAADS activities in their respective districts. They are responsible for policy, assessment of effectiveness and general oversight of NAADS activities. The NAADS Secretariat is responsible for central procurement of inputs for farmers in district local governments. The ABCC approach will provide the opportunity for NAADS to strengthen the essential links with other players in the inputs chains thereby increase the ability to address constraints within the value chains under its support.

3.2 Enhancing Linkages with National Agricultural Research Systems (NARS)

The National Agricultural Research ACT, 2005 provides for the development of an agricultural research system for Uganda, hereby referred to as the National Agricultural Research System (NARS), for the purpose of improving agricultural research services delivery, financing and management. The NARS means a cross section of stakeholders whether in public or private sector; and comprises of the organization, public agricultural research institutes, universities and other tertiary institutions, farmer groups, civil society organization, private sector and any other entity engaged in the provision of agricultural research services. Currently, the linkages between NAADS, NARO and private sector actors within value chains are weak. Using the ABCC cluster, approach will ensure collaboration and participation of multiple actors involved in the R&D activities across value chains.

3.3 National Industrial Policy and 5-year Successive Strategies

The Area ABCC is in line with the National Industrial Policy whose vision is to build the industrial sector into a modern, competitive and dynamic sector fully integrated into the domestic, regional and global economies. The policy is being operationalized by 5-year successive National Industrial Sector Strategic Plans. The 5-year National Industrial Sector Strategic Plan has a specific focus on value addition of agricultural products. This is the specific relevance to the ABCC which aims to enhance value chain addition through exploitation and development of natural domestic resource-based industries and promoting competitive industries that use local raw materials; and; promoting agro-processing; focusing on food processing, and value addition in niche export markets. It is in this light that the ABCC approach to inputs supply premised.

3.4 Linkages with Ministry of Finance Planning and Economic Development (MFPED)

The Ministry of Finance Planning and Economic Development has always been significant in coordination of the finance function for the Agricultural sector. The Ministry of Finance,

Planning and Economic Development (MoFPED) is mandated to formulate sound economic and fiscal policies. It is also responsible for the mobilization of resources for the implementation of government programs. It is also responsible for the disbursement of public resources as appropriated by Parliament and accounted for in accordance with national laws and international best practice. The area based commodity clusters are expected to stimulate development of many ancillary services including the development of SACCOS. Therefore, the development of ABCC will benefit greatly from the functions of the Ministry of Finance and Economic Planning.

3.5 Linkages with Ministry of Trade Industry and Cooperatives (MTIC)

The Ministry of Trade, Industry and Cooperatives (MTIC) is a cabinet level ministry of the government of Uganda. The mission of the ministry is to "develop and promote a competitive and export-driven private sector through the acceleration of industrial development", with the ultimate objective being the growth of the Ugandan economy. The development of the Area Based Commodity Cluster Approach therefore greatly benefits from the effectiveness of the Ministry of Trade in Promoting production, processing and both internal and export trade in the fruit industry.

3.6 Uganda National Bureau of Standards

The role of UNBS is the formulation and promotion of the use of standards; enforcing standards in protection of the public health and safety and the environment against dangerous, counterfeit and substandard products; ensuring fairness in trade and precision in industry through reliable measurement systems; strengthening Uganda's economy by enhancing competitiveness of local industries and promotion of quality exports through standardization, quality assurance, testing and metrology.

UNBS carries out the following activities: standards development; assisting industrialists/manufacturers and producers to improve the quality of their products and services; providing information services on all matters related to standards, quality assurance, metrology and testing; market surveillance to rid the market of dangerous, counterfeit and substandard products; verifying accuracy of weighing and measuring instruments used by traders and consumers in commercial transactions and calibrating measuring and testing equipment used in industry; carrying out shipment inspection and conformity assessment for exports, imports and tender supplies; assisting the private sector, procurement agents, government and the general public in conformity assessment of goods by testing, measuring and inspection against standards and/or specifications; carrying out factory inspection to evaluate conformance with standards; and liaison with national, regional and international standardization and related bodies. It is expected

NAADS will link with UNBS to ensure that industrialists, producers and inputs dealers within the ABCC benefit enormously from the services of UNBS.

3.7 Local Governments

Local governments continue to play a big role in the performance of the agricultural sector. They implement government programs like NAADS and provide support to other sector interventions. The local governments continue to provide, through mobilization, monitoring, supervision and guidance, and support to agricultural development. In spite of this, the link between MAAIF and local governments remains weak probably because of poor interpretation of different roles of central and local government agencies. Currently, extension systems within local governments are weak. While the ABCC will benefit greatly in reconfiguring the functions of the local extension workers, it is hoped that additional farmer owned extension systems will emerge from the commodity clusters

3.8 Farmer Institutions

Farmer-owned institutions are important for mobilizing farmers around a common objective, delivery of services, as well as policies that support agricultural development. Farmer institutions are key entry points for service delivery to individual households or communities. NAADS has established Farmer Committees in a number of pilot districts and are due to roll out to more districts. Farmer committees are expected to be the foundation within which the ABCC will be developed.

4.0 Objectives

4.1 Overall Objective: To pilot establishment of Area Based Commodity Clusters in selected parts of Uganda.

4.2 Specific Objectives:

- To link inputs delivery to production, processing and value addition processes
- To create a critical mass of produce for bulk marketing and industrial processing
- To stimulate participation of farmer cooperatives and other farmer institutions in the distribution of agricultural inputs and machinery for value addition
- To enhance visibility of government interventions and ease identification of emerging constraints.

5.0 Expected Outcomes and Outputs

5.1 Key outcomes

- a. Production from individuals within a cluster maximized within the medium term*

Commodity clusters exploit the economies of scale of their mass-production subsystems and components to deliver the best performance of the sum relative to cost.

b. Efficient actors' institutions and organizations leveraged

Clusters will perform best where there are organized and well-functioning stakeholder institutions.

c. efficiency of resource utilization (Human, natural, physical & financial resources) increased

Clusters maximize resource usage because a single resource can be used by more than one actor. e.g a tractor plough can be used by several farmers within a cluster during different times of the year. This is contrary to where a tractor is owned by a single farmer and is kept redundant when that farmer is not in production.

d. Production failure cushioned

Clusters minimize faults within the system. They are fault-tolerant, meaning that if a unit of the cluster fails during the production process, its job will be given to another unit automatically. Therefore, most of the tasks from an end-user point of view are automatized and taken care of by the system.

e. Access to markets and other related services increased

Because of increased production, value addition and other related services farmers operating under a cluster arrangement have relatively higher chances of accessing markets and other related services than those who are not in clusters

6.0 Targeted areas for commodity clusters

Area based commodity clusters are selected using the following set of criteria

- Presence of a commodity that can be produced across agro-ecologically related districts in all regions of the country.
- Proximity to present or upcoming processing facilities,
- Presence of ongoing private/public sector production and commercialization initiatives
- Presence of previous production efforts that need consolidation and concentration

7.0 The Commodity Clusters

Initially, clusters of the following commodities were established: Beef and Goats, Apples, Pineapples, Citrus, Mangoes, Tea, Cocoa, Cashew Nuts, and Cassava. Dairy and food security crops e.g. bananas, Maize, beans, sorghum, rice, cowpeas and others will be integrated within clusters depending on demand and availability of funds.

Table 1 below provides summary of clusters per commodity and number of districts covered.

Table 1: Clusters per commodity

Commodity	No. of Clusters	No. of Districts	Sub-zones
Beef and Goats	8	53	Masaka, Mubende, Mengo, Karamoja, Teso, Lango, Acholi, Bunyoro, Bukedi
Apples	4	10	Kigezi, Rwenzori, Mt Elgon, Sebei
Citrus and Mangoes	11	68	Lango, Acholi, Teso, Busoga, Mengo, Mubende, Masaka, Bukedi, West Nile, Ankole, Rwenzori, Bunyoro
Pineapples	4	22	Mengo, Mubende, Masaka, Ankole, Bunyoro
Cassava	11	87	Lango, Acholi, Teso, Busoga, Mengo, Mubende, Masaka, Bukedi, West Nile, Rwenzori, Karamoja, Bunyoro
Cashew Nuts	4	18	Acholi, Mengo, Teso, West Nile, Bunyoro
Tea	10	23	Kigezi, Ankole, Rwenzori, Bunyoro, West Nile (Zombo), Mubende, Mengo
Cocoa	7	25	Bunyoro, Busoga, Mengo, Mubende, Masaka, Rwenzori, West Nile (Koboko)

7.1: Beef and Goats Clusters

Clusters on beef and goats concentrate on developing the commodity value chains including among others providing breeding stock and developing other infrastructures e.g water and feed lots that will lead to increased production of beef for both local and export markets. These include:

- i. Beef & Goats Cluster 1: In MASAKA SUB ZONE covering districts of Ssembabule and Lyantonde.
- ii. Beef & Goats Cluster 2: In MUBENDE and MENGO SUB ZONES covering districts of Butambala, Gomba, Luwero, Kiboga, Mubende, Kasanda, Kyankwanzi, Nakaseke, Nakasongola
- iii. Beef & Goats Cluster 3: In KARAMOJA SUB ZONE covering districts of Abim, Nakapiripirit, Nabilatuk, Amudati, Moroto, Napak, Kotido, Kabong, Karenga

- iv. Beef & Goats Cluster 4: In TESO SUB ZONE covering districts of Soroti, Serere, Ngora, Katakwi, Amuria, Kapelebyong, Kumi, Kaberamaido, Karachi, Bukedea
- v. Beef & Goats Cluster 5: In LANGO SUB ZONE covering Districts of Apac, Lira, Dokolo, Amolatar, Otuke, Oyam, and Alebtong,
- vi. Beef & Goats Cluster 6: In ACHOLI SUB ZONE covering Districts of, Pader, Amuru, Gulu, Agago, Lamwo, and Kitgum
- vii. Beef & Goats Cluster 7: In Bunyoro sub-zone covering districts of Buliisa, Hoima and Kikuube
- viii. Beef & Goats cluster 8: In Bukedi sub-zone districts of Tororo, Busia, Butaleja, Budaka, Kibuku, Palisa and Butebo

7.2 Apple Clusters

Clusters on apples concentrate among others on providing good apple varieties (Anna and Golden Dorset) to farmers, promoting good agricultural practices, value addition, and increasing local market access and share. These include:

- i. Apple Cluster 1: In Kigezi sub-region covering districts of Kabale and Rukungiri
- ii. Apple cluster 2: In Rwenzori Sub-region covering Districts of Kasese, Bunyangabo, Bundibugyo and Kabarole
- iii. Apple cluster 3: In mount Elgon region covering districts of Mbale, Bududa and Bulambuli
- iv. Apple cluster 4: In Sebei Sub-region covering Districts of Kween and Kapchorwa

7.3. Citrus and Mango Clusters

Over the last 5 years the Government of Uganda through the NAADS Secretariat has been supporting growing of Citrus and Mangoes in various parts of Uganda through provision of seedlings. Varieties of Citrus given out have included Hamlin, Valencia and Washington Navel. Government has also prioritized the establishment of the Soroti fruit factory to help the local population access a long-term local market. Citrus growing has now spread to Northern, Eastern and Western Uganda with many farmers now involved in its production.

The government of Uganda has also been supporting growing of mangoes in various parts of Uganda. Currently mangoes are grown in many regions of Uganda. In the dry

zones of North, Eastern and the Rift valley of Western Uganda, varieties Kent, Tommy Atkins Keitt, Parvin, Apple mango are more suitable. These varieties are ideal because under these conditions, they bear fruits at 2-3 years after planting and bear continuously every year.

Significant research effort has also been made in characterizing the mango varieties for the different markets and the environment suitability in Uganda. Mango varieties characterized for the fresh market include; Tommy Atkins, Kent, Keitt, Parvin, Zillate, and Kate. Whereas, the mango varieties currently recommended for processing include Keitt, Parvin, Glenn, Kent, Bire and Apple Mango. These varieties provide hope for expansion of the production of mangoes in Uganda for the sustainability of both the fresh market and the new emerging fruit processing factories. Besides, what makes the future even brighter is the new technology currently under validation for mango production during off season.

There is need to concentrate efforts through developing sustainable commodity clusters for citrus and mangoes that will promote better prospects for value addition, processing and market linkages.

These are the clusters:

- i. Mango & Citrus cluster 1: To cover the districts of **Lango & Acholi**, i.e Nwoya, Gulu, Amuru, Kitgum, Lamwo, Agago, Omoro, Lira, Oyam, Kole, Alebtong, Apac, Kwania, Bulisa, Kiryandongo, and Adjuman
- ii. Mango & Citrus Cluster 2: To cover **Teso Districts** of Soroti, Kaberamaido, Serere, Amuria, Kumi, Kapelebyong, Kalaki, Bukedea, Ngora Dokolo, and Amolatar
- iii. Mango and Citrus cluster 3: To cover the **Busoga districts** of Kamuli, Buyende, Namutumba, Budaka, Mayuge, Iganga, Bugiri, Luuka, Jinja
- iv. Mango and Citrus Cluster 4: To cover **Mengo sub-region** Districts of Luwero, Nakaseke, Nakasongora, Mpigi, Butambala, Gomba, Mukono, Kiboga
- v. Mango and citrus Cluster 5: To cover **Bukedi sub-region** districts of Budaka, Busia, Butaleja, Kibuku, Butebo, Pallisa and Tororo
- vi. Mango and citrus Cluster 6: To cover **Mubende Sub region** districts of Mubende, Mityana, Kasanda, Kiboga, and Kyankwanzi

- vii. Mango and citrus Cluster 7: To cover **Masaka** region covering Districts of Masaka, Lwengo, Rakai, Lyantonde, Kyotera, Kalungu, Ssembabule and Bukomansimbi
- viii. Mango and citrus Cluster 8: To cover **West Nile region Districts** of Yumbe, Arua, Maracha, Koboko, Moyo, Zombo and Nebbi.
- ix. Mango and citrus Cluster 9: To cover **Ankole sub-region Districts** of Ntungamo, Kiruhura, Mbarara and Isingiro
- x. Mango and citrus Cluster 10: To cover **Rwenzori sub-region Districts** of Kasese, Ntoroko, Bundibugyo, Kamwenge, and Bunyangabo
- xi. Mango and citrus Cluster 11: Bunyoro sub region: Buliisa, Kagadi, Hoima, Masindi, Kikuube, Kiryandongo, Kibaale, Kakumiro

7.4 Pineapple Clusters

Pineapples can be grown in most districts in Uganda. It is grown by mostly smallholders as a sole crop or an intercrop with other crops especially bananas. Major producing areas are Kayunga, Masaka and Luwero districts with substantial production coming from other districts, such as Tororo, Iganga, Kasese, Bushenyi, and Ntungamo. Varieties of pineapples grown currently include: the small sized spiked (Sasilimu) also known as 'Queen Victoria' variety and the large smooth Cayenne (smooth, spineless leaves). However, farmers generally prefer the smooth cayenne which allows ratoon cropping, is larger and juicier while Queen Victoria gives one fruit in its life time and the farmer has to cut back or replant after each harvesting cycle.

The following Pineapple clusters are proposed;

- i. Pineapple cluster 1: To cover districts of Kayunga, Luwero, Mukono, Nakaseke and Kassanda
- ii. Pineapple Cluster 2: To cover greater Masaka Districts of Masaka, Kyotera, Rakai, Lyantonde, Ssembabule, Lwengo, Kalungu, and Bukomansimbi
- iii. Pineapple Cluster 3: To cover Bunyoro Districts of Hoima, Kikuube, Kibaale, Masindi and Kiryandongo
- iv. Pineapple Cluster 4: To cover Ankole districts of Ntungamo, Mbarara, Rwampara and Isingiro

7.5 Cassava Clusters

The Government of Uganda is giving support to Cassava growing and value addition. Cassava is being promoted as both a cash crop and food security crop in various parts of the country. In regions of Acholi, Lango, West Nile, Teso and Bukedi cassava is being promoted as both a cash crop and food security crop. In regions of Busoga, Central Uganda and Western Uganda cassava is being supported as a purely food security crop. Cassava varieties currently being promoted include NAROCAS 1 and NASE14.

Development of cassava clusters is concentrated in Acholi, Lango, West Nile, Teso and Bukedi regions where Government is promoting cassava growing as both a cash crop and food security crop. The remaining parts of the country continue receiving moderate quantities of cassava cuttings to promote food security and prepare for later commercialization.

The following are the cassava clusters:

- i. Cassava cluster 1: To cover regions of Acholi and Lango in Districts of Nwoya, Gulu, Amuru, Kitgum, Lamwo, Agago, Omoro, Lira, Oyam, Kole, Dokolo, Alebtong, Apac, Kwania, Amolatar. Otuke
- ii. Cassava cluster 2: To cover West Nile Districts of Nebbi, Zombo, Arua, Maracha, Koboko, Yumbe, Moyo and Adjumani
- iii. Cassava cluster 3: To cover Teso sub-region districts of Soroti, Kaberamaido, Serere, Amuria, Kumi, Kapelebyong, Kalaki, Bukedea and Ngora
- iv. Cassava Cluster 4: To cover Bukedi sub-region districts of Budaka, Busia, Butaleja, Kibuku, Butebo, Pallisa and Tororo
- v. Cassava Cluster 5: To cover Bunyoro Sub-Zone Districts of Kiryandongo, Buliisa, Kikuube, Hoima, Kagadi and Masindi.
- vi. Cassava Cluster 6 (Food Security): To cover Masaka Sub-zone Districts of Bukomansimbi, Kalangala, Kalungu, Kyotera, Rakai, Ssembabule, Lyantonde & Masaka
- vii. Cassava Cluster 7 (Food Security): To cover Mengo Sub-zone Districts of Buikwe, Butambala, Buvuma, Gomba, Kayunga, Luwero, Mukono, Nakaseke, Nakasongola
- viii. Cassava Cluster 8 (Food Security): To cover Mubende Sub-zone districts of Kasanda, Kyakwanzi and Mubende

- ix. Cassava Cluster 9(Food Security): To cover Rwenzori Sub-Zone Districts of Bundibugyo, Kamwenge, Kyenjojo, and Ntoroko
- x. Cassava Cluster 10 (Food Security) Karamoja: Abim, Napak, Nabilatuk, Nakapiripirit, Kotido
- xi. Cassava Cluster 11 (Food Security) Busoga sub region: Buyende, Kamuli, Luuka, Jinja, Mayuge, Iganga, Kaliro, Bugweri, Bugiri, Namayingi, Namutumba

7.6 Cashew Nuts Clusters

Cashew nut (*Anacardium occidentale*), is a drought resistant tree crop with enormous commercial potential. It thrives best in well drained deep sandy loam soils with high textural porosity. Cashew trees prefer a deep well drained and light textural soils. Globally, Cashew nuts is grown in about 32 countries in the world. Major producers are Cambodia, India, Indonesia, Sri Lanka, Thailand, Vietnam and Korea in Asia, Benin, Ghana, Guinea-Bissau, Ivory Coast, Nigeria, Senegal, Madagascar, Mozambique and Brazil. In East Africa, Cashewnut is grown in Tanzania, Kenya and Uganda.

In Uganda the Ministry of Agriculture Animal Industry and fisheries has prioritized cashew nut as one of the new crops with a high export potential. The NAADS Secretariat is currently promoting growing of three varieties of cashew nuts namely; AA7, AC4 and AC43.

Being a new crop there is need for concentrating its production in a few areas which will be used as learning centers and expansion to other parts of Uganda will follow after picking lessons from these areas. The following Cashew nuts clusters are proposed:

- i. Cashew nut cluster 1: To cover ACHOLI SUB-REGION Districts of Amuru, Gulu, Kitgum and Nwoya.
- ii. Cashew nut cluster 2: To cover MENGO SUB ZONE districts of Luwero, Gomba, Nakaseke, Nakasongora and Wakiso
- iii. Cashew nut cluster 3: To cover TESO SUB ZONE districts of Amuria, Bukedea, Kaberamaido, Kapelebyong, Katakwi, Kumi, Ngora, Serere, and Soroti
- iv. Cashew nut cluster 4: WEST NILE SUB ZONE districts of Nebbi and Pakwach
- v. Cashew nuts cluster 5 Bunyoro, Kiryandongo, Masindi, Hoima, Buliisa

7.7. Tea clusters

Over the last seven years the Government of Uganda through the NAADS Secretariat has been supporting tea growing in 24 districts of Uganda. The support has mainly been in providing tea seedlings to farmers. The tea clones given out have mainly been 303/577, 6/8 and 31/8. Currently tea is Uganda's fourth largest export commodity by value following coffee, fish and dairy. Current production of tea stands at 80,000 Metric tons of made tea per annum. Exports of tea are estimated at 60,000 Metric tons of made tea which earn Uganda about USD 86 million per annum. Currently the tea sub-sector is faced with problems of poor quality tea, problems of low production and productivity, and problems of poor marketing channels all of which lead to low prices offered for our tea at both farm gate and export levels. The proposed clustering of tea growing districts will go along to address some of the above problems.

The cluster include:

- i. Tea cluster 1: To cover KIGEZI SUB ZONE districts of Kabale, Rubanda and Rukiga
- ii. Tea cluster 2: To cover KIGEZI SUB ZONE district of Kisoro
- iii. Tea cluster 3: To cover KIGEZI SUB ZONE districts of Kanungu and Rukungiri
- iv. Tea cluster 4: To cover ANKOLE SUB-REGION districts of Ntungamo and Rwampara
- v. Tea cluster 5: To cover ANKOLE SUB-REGION districts of Sheema, Bushenyi, Mitooma and Buhweju
- vi. Tea Cluster 6: To cover RWENZORI SUB ZONE districts of Kabarole, Kyenjojo,
- vii. Tea Cluster 7 : To cover RWENZORI SUB ZONE Kitagwenda, and Kamwenge.
- viii. Tea Cluster 8: To cover BUNYORO SUB ZONE districts of Kikuube, Kagadi, Kakumiro and Kibaale
- ix. Tea Cluster 9: To cover WEST NILE SUB ZONE district of Zombo
- x. Tea Cluster 10: To cover MUBENDE and MENGO SUB ZONES districts of Mityana and Buikwe

7.8. Cocoa clusters

Cocoa is one of the commodities that the NAADS Secretariat has been supporting over the last 5 years. Currently cocoa is ranked 5th in export earnings following coffee,

fisheries, dairy and tea. The support has mainly been in form of cocoa seedlings to farmers. Two major cocoa varieties namely Upper Amazon and Trinitorio have been given out to farmers in 25 cocoa growing districts. Problems facing cocoa production include poor quality beans, low production, low productivity, poor marketing channels, and poor farmer organizations all of which result in relatively low prices given to farmers. The proposed clustering is aimed at addressing some of the above problems

The following are the Cocoa clusters:

- i. Cocoa Cluster 1: To cover BUNYORO SUB ZONE districts of Hoima, Kikuube, Kagadi, Kakumiro, Masindi, Kibaale and Kiryandongo
- ii. Cocoa Cluster 2: To cover BUSOGA SUB ZONE districts of Iganga, Bugweri, Jinja, Kaliro, Kamuli, Luuka, and Mayuge
- iii. Cocoa Cluster 3: To cover MENGO SUB ZONE districts of Buikwe, Mpigi and Mukono
- iv. Cocoa Cluster 4: To cover MUBENDE SUB ZONE districts of Mityana and Mubende
- v. Cocoa cluster 5: To cover MASAKA SUB ZONE district of Kalangala
- vi. Cocoa Cluster 6: To cover RWENZORI SUB ZONE districts of Bundibugyo, Kamwenge, Kasese and Ntoroko
- vii. Cocoa Cluster 7: To cover WEST NILE SUB ZONE district of Koboko