

# The institutional reforms in Agricultural Input distribution services in Uganda: A case of involvement of soldiers in input distribution in Uganda

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#### **ABSTRACT**

This paper analyses different institutional reforms in the agricultural inputs' delivery services and how the reforms contributed to the evolution of the current Operation Wealth Creation (OWC) program in Uganda. A community-based research approach was used. The study interviewed 43 key policy actors in agricultural inputs distribution services. Findings indicate that many reforms were implemented but alternated between two major approaches; i) when inputs and advisory services were fused up and delivered as a package, and ii) when inputs and advisory services were delivered separately by the extension agents. The different phases are categorised as; Regulatory (1922-1956) and Educative (1957-1971) phases, where inputs and advisory services were fused; Advisory (1992-2013) and Single Spine (2014-to date) phases, where inputs and advisory services delivery got separated. In all the approaches, the services lacked proper coordination, and in some cases no institutional frameworks to guide the extension services leading to ineffectiveness. Furthermore, some of the strategies used e.g coerciveness as a tool for advisory services under Regulatory phase and separating inputs from advisory services in the later Advisory phase set a favourable ground for involvement of the soldiers to specifically handle input delivery under OWC program. It is practically impossible to separate input delivery from advisory services if effective agricultural transformation is to be achieved at farmers' households. The findings are important in unveiling the inherent challenges in input delivery in Uganda and guiding policy decisions on appropriate reforms in the agricultural input delivery to poor farmers. Limited information is available regarding the appropriate agricultural institutional reform that can be effective and sustainable in the country.

Key words: Agricultural inputs, extension services, institutional frameworks, NAADS, Operation Wealth Creation, Uganda

### RÉSUMÉ

Cet article analyse différentes réformes institutionnelles dans les services de distribution des intrants agricoles et comment ces réformes ont contribué à l'évolution du programme actuel Operation Wealth Creation (OWC) en Ouganda. Une approche de recherche communautaire a été utilisée. L'étude a interrogé 43 acteurs clés de la politique dans les services de distribution des intrants agricoles. Les résultats indiquent que de nombreuses réformes ont été mises en œuvre, mais ont alterné entre deux approches majeures : i) lorsque

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Received: 14 January 2021 Accepted: 17 October 2021 Published: 30 April 2022 les intrants et les services de conseil étaient fusionnés et livrés en tant que package, et ii) lorsque les intrants et les services de conseil étaient livrés séparément par les agents de vulgarisation. Les différentes phases sont classées comme suit : les phases Réglementaire (1922-1956) et Éducative (1957-1971), où les intrants et les services de conseil étaient fusionnés; les phases de Conseil (1992-2013) et de Single Spine (2014 à ce jour), où la livraison des intrants et des services de conseil était séparée. Dans toutes les approches, les services manquaient de coordination adéquate et, dans certains cas, il n'existait aucun cadre institutionnel pour guider les services de vulgarisation, ce qui entraînait une inefficacité. De plus, certaines des stratégies utilisées, telles que la coercition comme outil de services de conseil dans la phase réglementaire et la séparation des intrants des services de conseil dans la phase de conseil ultérieure, ont créé un terrain favorable à l'implication des soldats pour gérer spécifiquement la livraison des intrants dans le cadre du programme OWC. Il est pratiquement impossible de séparer la livraison des intrants des services de conseil si une transformation agricole efficace doit être réalisée au niveau des exploitations agricoles des agriculteurs. Les résultats sont importants pour dévoiler les défis inhérents à la livraison des intrants en Ouganda et guider les décisions politiques concernant les réformes appropriées dans la livraison des intrants agricoles aux agriculteurs pauvres. Les informations disponibles sont limitées concernant les réformes institutionnelles agricoles appropriées qui peuvent être efficaces et durables dans le pays.

Mots-clés : Intrants agricoles, services de vulgarisation, cadres institutionnels, NAADS, Operation Wealth Creation, Ouganda

## INTRODUCTION

World over, agricultural extension services have been greatly criticized for being inefficient, costly and outdated especially in developing countries (Feder et al., 2010; USAID, 2015; Barungi et al., 2016). Yet, without doubt, the delivery of agricultural extension services has been proven to play a critical role in improving households' production and productivity that can guarantee food and income security for the rural poor resourced farmers. It is through extension services that farmers are not only provided with high yielding modern inputs but also knowledge on how best to manage the inputs for better results. In principle therefore, agricultural extension services comprise two major roles; (i) input delivery, and (ii) advisory services roles. Of late, the advisory services have been extended into aspects of guiding farmers on group formation, farming as a business, value addition and agro-processioning, marketing and enterprise developments, all of which offer a comprehensive support for a farmer to produce enough for consumption

and the extra for incomes. Birner (2011) in a study of the NAADS program does illustrate the strong complementary roles between inputs delivery and advisory services if effective input delivery is to be achieved and further guided on the strong need to incorporate households' characteristics of farmers, including taking into account the competencies and skills of extension agents that are involved.

The pathways demonstrate the interplay between inputs and advisory services components in ensuring better choices of quality inputs for effective production and incomes. Despite the views expressed in the pathways (Fig1), what has remained contentious among policy makers and technocrats is the question of whether the input and advisory services roles could be disjointed from each other and separately delivered or should instead be fused up and delivered as a package by the extension agents. The arguments, coupled with limited study, has been the major root cause of several reforms in extension services in developing countries.

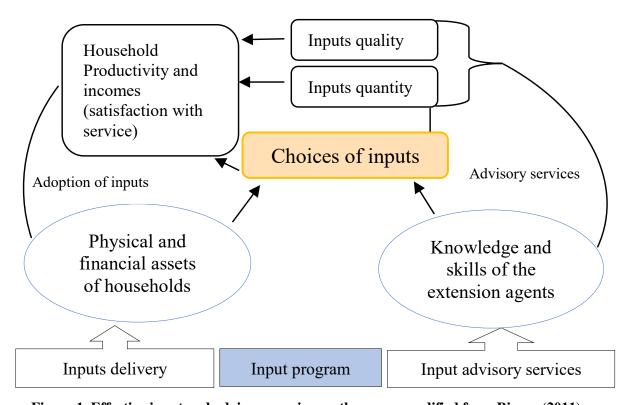


Figure 1. Effective input and advisory services pathways as modified from Birner (2011)

**Agricultural** extension reforms and development. Efforts to reform agricultural extension services in developing countries were aimed at benefiting the poor farmers who constituted the majority of the population but relied on subsistence farming for their livelihoods. Developing countries perceived that improving farmers' production and productivity through provision of quality inputs and necessary information was one of the best strategies for poverty reduction campaigns that had dominated the Government agenda at that time (Barungi et al., 2016). In part was the fact that Official Development Assistance (ODA) towards agricultural extension services in Africa (especially South of Sahara) contributed 57% of total aid in the 1990s and 2000s, which was a motivation to governments to focus on extension services in addressing the needs of the poor (Nederlof et al., 2011; FAO, 2015).

The 1990s and 2000s also witnessed a period of

strong advocacy for private sector involvement in the provision of services to the citizen, characterized by frequent calls from World Bank, IMF and other donors for liberalization of the economies, opening up of markets and empowerment of citizens to demand for services of their interests. Extension service as a key sector was targeted, and development partners quickly engaged governments to allow private sector involvement including other innovative steps in the provision of agricultural inputs and advisory services as demanded by farmers. In 2005, in Vietnam, DANIDA, a development arm of the Danish Government instituted a separate livestock input delivery systems from the traditional government approach. Separate as it was from advisory services, policy makers and farmers questioned whether the new livestock input delivery intervention would have done much better if fused into the mainstream extension services or if executed through farmers' organizations for effective outputs, monitoring and acceptability (Jens et al., 2005). Indonesia, on the other hand had earlier on taken a much radical step (under the new order era of the Soeherto regime) to deploy soldiers to distribute inputs to farmers, while advisory services could be undertaken by qualified extension workers. The Indonesia case is documented as one of the successful extension reforms involving soldiers in input distribution in which rice production more than tripled (4,293,000 to17,156,00 metric tones), and was recognized and awarded certificate of self-reliance by Food and Agricultural Organization (Mirojul et al., 2016). The Vietnam and Indonesia cases are examples of some of the many reforms by developing countries that were undertaken in an attempt to get the best approaches that could effectively deliver inputs to farmers, a struggle that kept extension services in transitions.

Agricultural Extension services reforms in Uganda. The agricultural extension reforms in Uganda dates back to the early 1920s when the British colonial masters begun the process of organizing and guiding farmers to produce materials for their industries back in Britain (Semana et al., 2018). Over the decades that followed, many reforms were undertaken, and implemented but with limited success following widespread complaints from stakeholders on quality of inputs delivered, competencies of the extension agents, lack of or inappropriate policies, corruption, poor infrastructures, inadequate staffing and funding among others (Rivera and Qamar, 2003; Barungi et al., 2016; Semana et al., 2018). The latest reform, the Operations Wealth Creations (OWC), was a stop gap measure by the President of Uganda in 2013, deploying soldiers to spear head input distribution to farmers (MoD and VA, 2014; OPM, 2015). Soldiers were deployed based on the trust the President had in them as officers who are incorruptible, patriotic and able to execute orders to the dot. Deploying soldiers would not only cure the inefficiencies in the previous approaches as outlined, but because the soldiers have successfully executed other

assignments in other sectors where they are engaged, including outstanding outputs such as construction of health and education facilities, disaster and risk management (floods, water weeds, locust invasion, disease epidemics), eliminating rebels' activities in and outside the country among others

Just as in other developing countries, one critical contentious issue in the designs of these reforms was the question of whether inputs and advisory services roles could deliver a fused or separate roles. How these separation or fusion aided effective input delivery to the satisfaction of stakeholders and how the designs precipitated the evolution of the latest reform (OWC) in Uganda has not been adequately documented. This study aimed at contributing to this knowledge by reconstructing and analyzing the different institution reforms and approaches on input distribution in Uganda, the perceived good practices and mischief in the reforms, including the accompanying frameworks and how they could have contributed to the current OWC program in the Country. The paper concludes by providing policy options that can improve the efficacy of the current inputs distribution services to smallholder farmers in Uganda.

#### **METHODOLOGY**

## Participants, sampling and data collection.

The paper is based on three main types of data sources; i) published information relating to inputs distribution reforms and frameworks in Uganda (policy documents, research reports including other relevant published literature), ii) participants' observations by the researchers and iii) Interviews and focus group discussions with selected key informants and farmers involved in inputs distribution in Uganda with a major focus on Operation Wealth Creation (OWC). The key informant interviews and FGDs were mainly aimed at obtaining facts on the events, and their views and perceptions on the input distributions processes in Uganda since the 1920s. The study involved 43 policy stakeholders with demonstrated experience in the delivery of agricultural inputs services in Uganda as spelt out in (a) The Standard Order of Procedure (SOP) for OWC; (b) The National Agricultural Extension Policy, and (3) The National Agricultural Extension Strategy (MAAF, 2016).

In institutions where two respondents were purposely identified, one was from a strategic level to provide an understanding of the institutional reforms and frameworks while the other respondent was identified from the operational level to provide an insight on how the frameworks are applied in the field during inputs distribution processes to farmers. In the local government (Nakaseke district), out of a total of eight respondents purposively interviewed, two were from each of the subsectors of crops, livestock, fisheries and entomology, in which each subsector still had one respondent from the management and the other from operational levels. The respondents were interviewed using Key Informant Interviews (KII) guides prepared with approval from a team of six experts from Makerere and Gulu universities in Uganda.

The Focus Group Discussions (FGDs) involved two farmer committee groups, each comprising of nine purposively selected lead enterprise farmers from the sub-county farmers' committees. As guided by the local leaders and extension workers, the lead enterprise farmers (both men and women) had participated in the implementation of the OWC targeted enterprises (coffee, beans, maize, citrus, cows, goats, poultry) in the district for at least the last 3-5 years. The FGD interviews, moderated by the researcher using the FGD guides took an average of two hours. The respondents were interviewed to determine their perceptions towards the institutional reforms in distribution of inputs services and how the frameworks shaped up the current inputs' distribution processes under OWC. The subthemes in the guides included (i) evolution and performance of the institutional reforms and frameworks in inputs distribution in Uganda and (ii) how the different reforms eventually shaped up input delivery under OWC program.

Data analysis and tools. Responses were transcribed verbatim, while those in the local dialects of Luganda were first translated into English before importation into the Nvivo 12 plus software for thematic coding and analysis. By induction, open codes were assigned to clustered narratives in the responses. Each clustered response was created as a new node with an appropriate title. Through coding stripes, a word cloud analysis was performed to generate themes within the clustered responses

## The Advocacy Coalition Framework Theory (ACF). This theory developed by Sabatier and Jenkins- Smith in the 1980s has proved a useful theory in explaining policy reforms and implementations processes in institutions (Sabatier and Jenkins-Smith, 1993). The theoretical framework is comprised subsystems that have individuals and groups that constitute themselves into an "advocacy coalition". An advocacy Coalition is a group of individuals sharing policy beliefs and values about a policy under debate. Sabatier and Jenkins- Smith (1993) argue that beliefs and values guide individuals or groups' actions when it comes to decision making and can be used to map the relationships between various organizations within the policy subsystems. This in turn provides the causal theory upon which policy positions are constructed and later underpin the guiding instruments for operations. The policy subsystem is an element of the theory that refers to the interactions of the advocacy coalitions from different institutions that seek to influence governmental decisions towards a specific policy area. The assumption is that the subsystems contain a large number of actors from various public and private organizations actively concerned with a policy issue or problem. The subsystems arise because of a particular need or dissatisfaction with the existing debate or action with the view of causing a change or reform (Semana et al., 2018).

The Institutional dynamics in agricultural input distribution services. A case of military participation in input distribution in Uganda. For this study, the Advocacy Coalitions are Not only in input delivery sector that the colonial grouped into two main categories; the "State Actor Coalition" and "Non-State Actor Coalition". The "State Actor Coalition" constituted majorly the government bureaucrats mainly professionals in Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Local Governments, Academia, Research Institutions who promoted the maintenance of the traditional agricultural inputs' distribution services. The "Non-State Actor Coalition" comprised the development partners including World Bank, IMF, IFAD, CSOs and the farmers who pushed for a change in the way extension services including inputs distributions were being delivered.

#### RESULTS AND DISCUSSIONS

## Institutional reforms in agricultural input distribution in Uganda

Regulatory Phase of Extension Services (1922-1956). Agricultural extension services in the regulatory phase began around colonial times (1897-1907) with the importation of cash crops planting materials such as cotton, coffee, cotton and rubber as prioritized by Britain for its industries (Semana, 2002; Barungi et al., 2016). Despite limited knowledge, the chiefs were the "extension experts" who institutionalised coercion as an extension approach. relationship between input delivery advisory services could not be easily delineated, demonstrating some kind of unclear input and advisory services delivery approach to farmers. The regulatory phase was not effective in delivering inputs and advice to farmers because other than relying on instructions from colonial leaders, there were no appropriate policies to govern extension services to farmers. Coercive instructions meant that farmers had limited chances to express themselves in the entire processes as alluded to by a member of the Public sector coalition group during KIIs;

"The farmers had no voice over the entire extension processes because the chiefs were always right, executing 'orders from above', and therefore limiting effective participation of farmers" (KII of April, 2019).

leaders demonstrated their dominant views over the inferior African farmers who in this case, other than their labour and land had essentially nothing else to contribute. Pushing farmers to grow cash crops as prioritised by Britain was bound to compromise farmers' priority to produce food crops for their households, a process that likely affected the performance of the regulatory phase.

Educative Phase (1956-1971). This phase witnessed input and advisory services deliberately fused up and delivered as a package by extension agents. It focused more on building capacity of the farmers to be able to demand for the services, as was being advocated in the development paradigm at the time. Farmer's capacity was built through trainings in research institutions, district farms institute, village trainings sessions by extension agents, etc. Delivering inputs and advisory services as a package did not save the phase from being criticised and labelled as ineffective in aiding input access by the poor farmers. First, the phase had an ambitious plan of targeting the delivery of inputs and advisory trainings to all the households and yet the corresponding resources (extension workers and their facilitations) were not commensurate (Semana, 2002). Secondly, when the approach decided to use progressive farmers (1956-1963) to deliver inputs and advice to their colleagues, the progressive farmers were criticised for not only being a privileged group that utilised their positions to deprive others of the inputs provided by government, but also lacked the necessary knowledge to offer accompanying advisory services. This confusion caused a shift to another approach called the Training and Visit (T&V) implemented between 1964-1997 and heavily financed by the World Bank. The T&V required visiting the many farmers' households while offering both inputs and advisory services but also encouraging a two-way information flow missing in the previous extension approaches. With minimal lessons learnt from the progressive farmers' approach, resources in terms of available extension agents and the facilitations required to sustain the T&V proved

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pulled out, and the Government could inadequate. their production to reach a section of farmers to transform workers that were adequately facilitated delivered as a package in the reform, but resources available. In view of all these fusion of the inputs and advisory services indings, what was critical for farmers to sustain the services due to little services was not necessarily the World Bank eventually extension

extension services and approaches until continued on the back ground of services in all the fields of crops, animals 2014 when it was officially abolished. the above fields. The Unified Approach training of the extension worker in al which did not succeed due to unmatched entomology and fisheries, extension worker to provide extension package. advisory the scattered efforts experienced in the unified extension approach to streamline capacity development efforts and legal period in which the Government began rendering extension was characterized by 1980s. The unified extension approach World Bank, the Government undertook a in the country. In 1991, with support from frameworks to restore extension services witnessed a fusion of input and 1980sThe services place basic infrastructures and The approach 1997 implemented period recovery services was political turmoi required 1972-1979 strategy recovery inactive Phases

Dark period Recovery period (1971-1981)(1981-1997)Input delivery **Regulatory (1922-1956) Educative (1956-1971)** Advisory (1997-2013) Single Spine (2014-date) Phases Prioritized commodity Aimed at building capacities of Farmers were empowered to Aimed at merging advisory inputs as guided by the farmers through field days, demand for inputs and and input deliveries, while Guiding Britain and very Coercive study tours and farm institutes. advisory services, including incorporating research in policies and centralized approach Heavily financed by donors and the private sector extension. targeted all households Inputs and advisory services Inputs and advisory services Relationship Inputs and advisory services had a loose relationship, and Inputs and advisory services got separated. Inputs separated. Inputs delivered between could not be easily were fused and delivered as a delivered by farmers and by soldiers while advisory input and delineated. Deliveries were package by the extension private sector while advisory services by extension agents advisory done by Chiefs and farmers agents and farmers services by extension agents *No appropriate policy. Input delivery guided by Input delivery guided by No appropriate policy for* Input delivery was guided SOP (2014), Agricultural PEAP & LG Act of 1997, input delivery. Inputs delivery by the interest of Britain extension policy and PMA Policy, and NAADS was guided by donor interests focused on selected cash strategy of 2016, Act 2001. 2000 2016 1992 1997 2018 1956 1922 **Unified Extension** 

Figure 2. Reconstruction of the input institutional reforms

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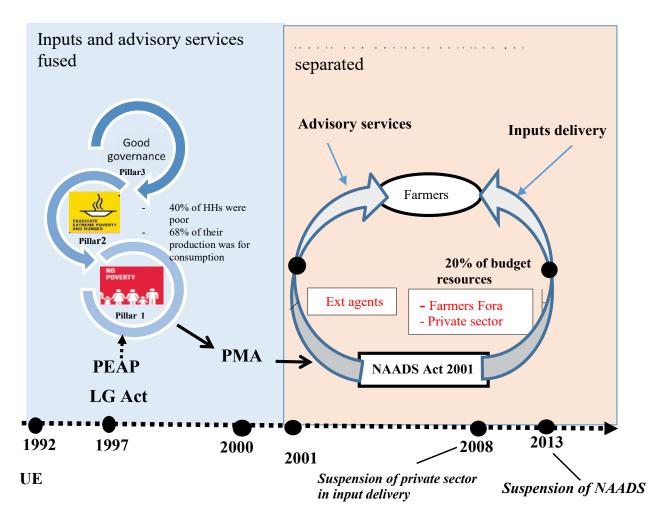


Figure 3. Policy reforms towards inputs and advisory services separation

In the early 1990s, the Government of Uganda like in other sub Saharan African countries undertook a deliberate effort to reduce poverty amongst the citizens, which by then stood at 40% with a weak GDP averaging \$330 per person per year. To actualize this effort, a decentralised Poverty Eradication Action Plan (PEAP) was formulated in 1997 with three main pillars; first was to increase incomes of the poor people; secondly, improving living standards of the poor people and, thirdly to promote good governance. Therefore PEAP set a foundation for other policy reforms towards poverty reduction amongst poor people. In that context therefore, targeting

the poor would mean reforming interventions in agriculture which formed the basis of their livelihoods. During that period, development partners such as World Bank vigorously engaged Government to carry out reforms that would favour neoliberal policies (Benin et al., 2010). The neoliberal policies advocated for economic liberalization, free trade, open privatization, deregulation reduction in government spending to enhance private sector participation in the economy (Gerring and Stron, 2005). In response, a multisectoral program (Plan for Modernization of Agriculture- PMA) was developed in 2000 to address the obstacles scattered in the different

economic sectors of the country to leverage agricultural transformation. The PMA aimed at reducing poverty from 56% in 1986 to 28% by 2014 within the framework of PEAP. It had seven critical pillars; technology development and research, national agricultural advisory services, agricultural education, agricultural infrastructure, agro-processing and marketing, sustainable natural resource utilization and improving access to microfinance. implementation of PMA witnessed inputs and advisory services fused up and being delivered as a package to farmers but with the recurrent challenge of low agricultural productivity. The PMA performance review reports indicated that the low agricultural productivity observed in Uganda was not a consequence of lack of researcher extension activity as both had received adequate funding in the past (MAAIF, 2000), the low productivity of the Ugandan farmers was caused mainly by poorly functioning farmer-extension- linkages and the failure of the research to respond to the real needs of the farmers (MAAIF, 2000; PMA, 2000; MAAIF, 2016). The non-State actor coalition group pushed for a quicker reform within PMA program. On the other hand, members of the State Actor Coalition ganged against the proposed reforms arguing that it would be radical and it was the interests of the donors that were being pushed. Since it was heavily financed by the Word Bank, it became possible for the government to easily embrace the reform aware of the limited pressure on the locally generated resources. Agricultural advisory services, the second of the seven pillars of PMA came in handy as an intervention area for the reform, eventually leading to evolution of NAADS through the NAADS Act 2000. The NAADS act set the beginning of the separation of inputs delivery from advisory delivery services in Uganda.

The separation of Inputs and Advisory Services roles under NAADS. The NAADS Act (2001) and the implementation manual

(2004) guided on separate advisory services and input delivery roles in the extension services to farmers (NAADS, 2004). In that guideline, advisory services were allocated more than 70% of the overall resources, while inputs took the balance of less than 30%. During its implementation, farmers took charge of the procurement of all advisory services and either delivered the services themselves or procured service providers to do so on their behalf. Extension workers employed by government were left to undertake the roles of quality assurance on input delivery services including setting up technology development sites for farmers. The NAADS believed in empowering farmers to demand for what they wanted as alluded to by one of the KIIs (April, 2019)

"There was a need for demand-driven processes to allow farmers to take control of the key processes in the extension system. This required that appropriate farmers' institutional structures be created that could merge with the formal extension structures. In this way, the formal processes would respond to what the informal (farmers) processes would generate, therefore seceding some powers to the farmers" (KII, April 2019).

In order to strengthen farmers' empowerment, NAADS operated through farmers' institutions referred to as farmers fora. The farmers fora were formed in parishes, with replication at the sub-county (most dominant), the district headquarters, and up to national levels to push for the interests of the farmers (Kwapong, 2015; MAAIF, 2016). The village groups would select three enterprises, which would then be harmonized with those from other villages at the parish forum, before onward submission to the sub-county for vetting and financing. The group's membership remained vibrant to a greater extent due to the social relationship that existed among the members of the community.

However, the farmers in the fora did not have adequate knowledge and experience to demand the kind of advisory services they wanted, even when the implementation guidelines mandated them to do so (MAAIF, 2016). Whereas farmers were also expected to participate in the selection of service providers and hold them accountable through the farmers for athey could not determine the kind of service providers to undertake the advisory services for them. The guidelines for the selection of members of the farmers for did not emphasize levels of education of farmers to source competencies. Applicants for advisory service provision contracts sometimes falsified documents submitted and the NAADS selection committee comprising of farmer forum representatives and technical persons at the sub-county would not be able to verify them (Barungi et al., 2016). This could result in awarding contracts to nonqualified persons in addition to many other corruption-related challenges (Feder et al., 2010; Kwapong, 2015). The farmer institution was therefore administratively weak and not prepared to perform the duties expected in the NAADS design (MAAIF, 2016).

The NAADS structure, which was well remunerated, compared to the Unified Extension Services (UES) in the traditional extension system, created a parallel extension system reporting to the NAADS Secretariat, as the UES reported to MAAIF. The parallel institutional reporting was an obstacle in the distribution of inputs to the farmers since accountability of performances was dominated by counter-accusations. During the FGD in the Nakaseke sub-county, farmers recalled that they were listening to NAADS officials more than the traditional extension workers because the NAADs officials would come to them frequently (because they had motorcycles) and also would bring inputs compared to the traditional staff who had nothing to give. This means that concerns from the farmers were flowing more on the NAADS reporting line and yet that line did not have the mandate to develop policies to address the concerns of the

farmers, creating an institutional mischief.

Financial institutional set up for inputs and advisory services under the NAADS. According to the NAADS implementation guidelines (2001), an estimated 72% of the funds was earmarked for advisory services while inputs would take on average 7% of the entire budget (Fig 4). This provision in the guidelines was adhered to for roughly the first three years of the program (2001-2003). However, as implementation progressed between 2004-2006, farmers reasoned that advisory services could not be done without accompanied inputs. As one of the KIs argued:

"NAADS was seen as not visible and stakeholders wanted visibility that could only be achieved through inputs causing alterations of approach. The budget gradually changed from advisory services line to input provision lines without any adjustment in the guidelines or NAADS Act of 2001" (KIIs, April 2019).

Therefore, from 2004 onwards, there was a gradual increase in funding towards inputs distribution than advisory services as observed in the Nakaseke District Local Government (Figure 4).

According to Birungi *et al.* (2016), NAADS deviated from its original design of providing advisory services to inputs supply. However, even when stakeholders were in support for the farmers to instead access inputs, the findings indicated that the shift to inputs supply had little contributions to farmers' adoption and subsequent improvements of income. Most of the inputs distributed were of low quality coupled with inadequate knowledge by farmers themselves to utilize the available inputs (World Bank, 2016). During FGDs meeting in Nakaseke sub-county, farmers agreed that:

"Most of the inputs especially animals continue to be of low quality than the ones we have either kept at home or prefer. The previous animals received were so wild and uncontrollable and sometimes we don't bother to adopt them".

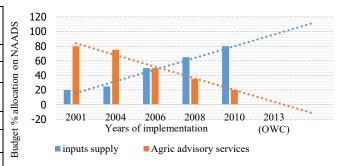
These discussions could also point to the understanding that the need and/or the quality of inputs received were not necessarily the only justifications for the failure of the NAADS program but also the attitude of the stakeholders within the State and non-State coalitions. Although the above trend was inconsistent with the provision of the NAADS Act 2001, the Ministry (MAAIF) responsible could not do its amendment due to their earlier negative perception towards the program. First, they looked at the Act as taking over their mandate of extension services and secondly, NAADS was pulling away a lot of resources from other programs within the ministry's activities. NAADS therefore ran with limited support of the technocrats from MAAIF and it lacked the technical staff in its establishment to specifically undertake inspection and quality assurance that remained under the Ministry's domicile

With limited support from the mother Ministry responsible for the formulation of the institutional frameworks, NAADS operated with a weak framework that could not easily be amended even when glaring gaps were detected. The implementation of NAADS was meant to be done alongside the other pillars of PMA, however, those pillars were not operationalized,

a situation which overloaded NAADS in an attempt to cover the gaps (MAAIF, 2016). Spreading the resources, meant underfunding the original core areas of NAADS, among others, shifting resources to inputs distributions as demanded by the farmers and was seen as support to the visibility of the extension services. NAADS began to operate outside the legal framework that established it in 2001 on top of the many reported cases of corruption associated with procurement of inputs, low capacity of the farmers to demand extension services, and lack of technical capacity in the private sector to provide a critical mass of advisory service providers to smallholder farmers. The President of the Republic of Uganda subsequently suspended NAADS in 2013. The President later established what he called Operation Wealth Creation to undertake the input distribution activities previously done by NAADS.

As indicated in Figure 4, resources for advisory services kept on dwindling while that of inputs delivery kept on increasing over the years of implementation without any amendments in the implementation guidelines or NAADS Act 2001. When policy actors were asked what could have caused this shift, the following themes and responses were generated:

Particular	Estimated cost (million \$)	%
Advisory and information services to farmers	77,425.29	71.7
Technology and Market development	7,027.35	6.7
Regulations and Technical auditing of service providers	1,475.49	1.4
Private Sector Institutional development	3,748.48	3.5
Program Management and Monitoring	18,262.81	16.9
Total	107,941.42	100



NAADS implementation guidelines 2004

Source: Field data

NAADS implementation in Nakaseke (2004-2010)

Figure 4. A Shift from advisory to input delivery roles under NAADS

Inputs were seen as a sign of visibility for government performance, compared to advisory services (KIIs, 2019)

Non adherence to existing NAADS law, the members of public coalition group were accused of refusing to amend the law (KIIs, 2019)



Inputs shortage

Inputs and legal frameworks



Majority of farmers never kept inputs for the subsequent season, leave alone young farmers joining the program (FGDs, 2019)

According to the KIIs from a member of public sector coalition group (2019), in the early 2001, the budget for inputs was just about 20% while that for advisory services stood at around 80%. However, The NAADS budget increased exponentially and by 2010, it had reached 80% for inputs against 20% for advisory services. The focus on inputs became a priority of government even when there was no amendment on the NAADS Act to streamline inputs delivery. The counter accusations, coupled with recurrent poor quality inputs to farmers affected the performance of NAADS in the advisory services phase. The separation of advisory from inputs delivery services, again did not facilitate input access leading to frustrations by farmers, and later suspension of the approach by the President in 2013.

The Single Spine Phase (2013- Present). The Single Spine aimed at merging the parallel and separate roles of input and advisory services delivery formerly under NAADS including abolishing the unified extension approach that had persisted since 1992. Following recommendations from the Cabinet Select Committee instituted by the President, the Single Spine merged the extension services role and handed it over to the Ministry of Agriculture, Animal Industry and Fisheries

while re-establishing back the extension directorate at the Ministry to oversee the roles. The input delivery role on the other hand was handed over to NAADS Secretariat, a much linear structure than the original NAADS since the extension staff under NAADS were already abolished, and a visible staff vacuum in the delivery of inputs to farmers was witnessed. The separation of input and advisory services roles became even more prominent in the single spine phase.

In July 2013, the President visited Luwero/Rwenzori region and while interacting with the bush war veterans, there was wide spread complain that NAADS never gave them inputs and yet they (veterans) did a lot to usher in the Government into power.

In July 2013, the President launched an initiative to support civilian veterans codenamed 'Luwero–Rwenzori Anti-Poverty Campaign'. Among the thematic areas emphasized were the distributions of seeds, planting and breeding materials (MAAIF, 2016). The MAAIF, NAADS and Coffee Development Authority (CDA) participated in the initiative under the coordination of the Office of the Prime Minister (OPM). The targeted priority commodities were coffee, tea, citrus, mango, maize, beans

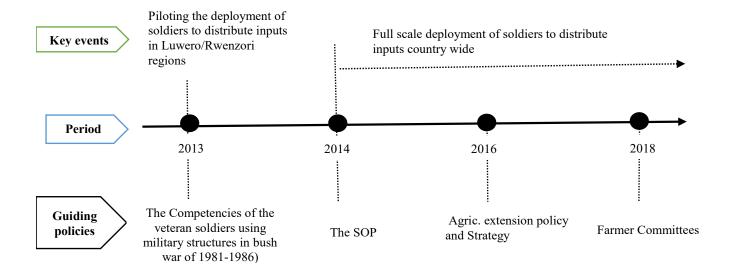


Figure 5. Key institutional developments in the single spine phase

and cassava covering districts of Nakaseke, Wakiso, Luwero, Kiboga, Mityana, Kibaale, Mukono, Kiruhura, Isingoro, Mayuge, Manafa, Gulu, Amuru, Bundibugyo, Ntoroko, Kabarole, Kyenjojo, Buhwezi, Butambala, Gomba, Mpigi and Lwengo. Mobilization in the units was launched by the President from Ngoma sub-county in Kabalega unit which eventually spread to all other units. The implementation of the initiative was a collaborative effort of the UPDF commanders (soliders) who took the coordinating roles and the designated Local governments who carried out the mobilization and quality assurance roles (MAAIF, 2016). The report captured in the NAADs Monitoring and Evaluation Framework of 2016, and alluded to by the report of the Parliamentary Committee on Agriculture in 2017, indicated that the Luweero-Rwenzori initiative was largely successful. The President then ordered a large scale deployment of the soldiers covering the whole country on the 9th June 2014, during the Hero's day celebration in Mityana District (Parliament of Uganda, 2017).

The OWC journey begun in July 2013, when the

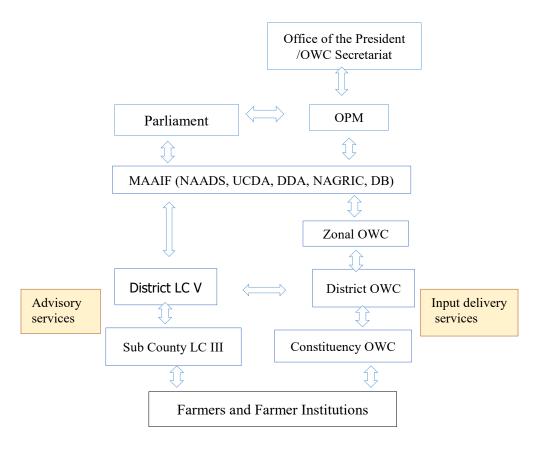
Uganda President was on a tour in Nakaseke district and had interactions with the veterans of the NRA war, who intimated that they were unable to benefit from programs being delivered by the government they ushered into power. This was on the account that the NRA war that brought the current government into power had its bases in Luwero/Rwenzori regions. In particular, the veterans argued that NAADS program was unsuccessful in delivering inputs to the beneficiaries. The President reportedly fronted the idea of using the veterans themselves to pilot the distribution of inputs to the community in the war districts of Luwero and Nakaseke. The Pilot was conducted in veterans' units (Kabalega, Luta, BB Mondrana, Ngoma, among others) established during the NRA war and run by military principles (KIIs, 2019)

According to OPM (2015) assessment report, the veteran soldiers successfully executed their roles in delivering inputs to farmers and there was reported increase in production and yields of maize in the region. Consequently, in 2014, the President ordered massive deployment of

soldiers to spearhead input delivery in all the other districts in the country. In the same year (2014), a Cabinet Committee was constituted by the President to draft an institutional framework for guiding the operations of soldiers. This committee delivered the Standing Orders of Procedures (SOP), a framework that has been used to man Operation Wealth Creation Program to date (Birungi et al., 2016; MAAIF, 2016). The Committee made recommendations which were adopted by the Cabinet in June 2014 as follows; 1) Transfer the extension services from NAADS to MAAIF; 2) Merge the extension services (both in terms of human and financial resources) at the local government level into District Production Department to eliminate parallel extension, and

3) Separate inputs distributions from extension services delivery. Accordingly, the NAADS Secretariat was to remain lean, handle only inputs chain management and procurement of strategic inputs of public interest, and promote agribusiness technologies. MAAIF was directed to work on a document that would facilitate the involvement of the soldiers in the extension services. This process culminated in the development of the Standard Order of Procedures (SOP), Agricultural Extension Policy and Strategy of 2016.

Guided by the SOP, input delivery and advisory services were more strongly separated with soldiers leading input delivery while extension workers remained with the advisory roles.



Source. Page 6 of SOP manual

Fig. 6. Inputs and Advisory services institutional path ways in OWC Program

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Governance structures under OWC. At its topmost organ, OWC is headed by Inter-Ministerial Committee chaired by Minister for the Presidency and comprising of Ministers responsible for Agriculture, Trade, Finance, Water & Environment and Local Government. The Secretariat is coordinated by the senior Presidential advisor on defence and security, working with directors responsible for inputs, low-cost housing, value addition, pension, among others. They coordinate activities such as planning, supervision and evaluation of the progress of the OWC program. Next in the hierarchy are the Zonal OWC coordinators or commanders operating in the 18 agricultural zones in the country. These zones include Acholi, Ankole, Bugishu, Bukedi, Bunyoro, Busoga, Kampala, Karamoja, Kigezi, Lango, Madi, Masaka, Mengo, Mubende, Rwenzori, Sebei, Teso and West Nile. The zonal coordinators oversee the activities of district and constituency coordinators who, together with the local government and community leaders identify relevant enterprises at the household level and coordinate with line agencies or departments to ensure socio-economic transformation. Also OWC provides a link with relevant ministries, agencies or departments directly linked to the agricultural production chain such as the National Agricultural Research Organisation (NARO), Uganda Industrial Research Institute, Financial institutions, Cotton Development Organisation (CDO), NAADS, National Forestry Authority (NFA), Uganda National Roads Authority (UNRA), Makerere University and UPDF. According to the SOP, OWC is supposed to work hand in hand with the production departments in the local governments.

The organogram shows two reporting lines (A and B), each with specific roles. Reporting line A alludes to the traditional system where advisory services to the farmers and other implementation issues go from farmers through the sub-county leadership to the district. The district reports are then submitted to the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) for appropriate responses. Parallel to this is reporting line B where the OWC commanders report to

their own commanders and directly to the office of the President. This pathway deals majorly with input delivery processes. However, both pathways generated and propagated the double and parallel reporting challenges in the inputs' distribution, an inherent problem documented in the previous phases.

In an attempt to mitigate the gap created by the absence of farmers groups, field findings confirmed that OWC began instituting back farmers' institutions in 2018 but was renamed as farmers' committees. The committee comprises farmer representatives of the different enterprises at parish levels. The roles of the farmers' committee are widened beyond OWC to include sensitization of farmers on OWC and other programs, coordinating with other organizations involved in farming, prioritizing the needs of farmers among others. According to farmers (KIs), giving them wider responsibilities does not restrict them to be answerable to OWC alone, which affects their commitment towards OWC program

### Financial institutions under the OWC program.

At the local government level, the SOP would require the constituency OWC commanders at the district to report to the District Production Officer (DPO) who is the head of agricultural extension services at the local government. It is established that this institutional requirement has been flouted, especially where the resources to facilitate the OWC commanders do not pass through the Production and Marketing Grants (PMG) under the leadership of the district authorities. This is further contrary to the requirement that all resources for extension services in the district be harmonized under the single spine extension reforms approved by the Cabinet in 2014 (MAAIF, 2016). As such OWC program resources operating outside the arms of the DPO compromise the decentralized functions of agricultural extension services. This, as further indicated in the report by the Parliamentary Committee on Agriculture (Parliament of Uganda, 2017) continues to affect extension services in the local governments since there is no harmony between the traditional extension workers and the well-remunerated OWC commanders.

The influence of the institutional reforms towards OWC **Program.** During the Regulatory phase, the colonial leaders used instructors and chiefs to deliver inputs to farmers. The chiefs applied coercion as a tool for enforcing orders over farmers to grow cash crops that provided raw materials for their industries in Britain. In the absence of any appropriate legal frameworks to guide inputs and advisory services, coercion in itself became a tool for enforcing compliance and achieving outputs. In the civil-military theory (Gallie, 2008) and further as argued by Morrish Zanowitch in his book of the professional soldier, soldiers are well known to apply coercion as an immediate tool to subdue its enemies to divulge information that helps in their success in the battle fields. Involvement of soldiers using a similar approach as the chiefs did, would therefore be perceived not only as a normal intervention but an extension of an earlier approach in the extension services delivery in the country. In one of the KIIs of 2019, the soldier alluded to the above arguments that;

"the concepts behind our deployment under OWC program were hatched in the military units maned by the veteran soldiers of the bush war that ushered the NRM government to power and has been carried along the entire input delivery pathways over the years".

Farmers agreed to this and explained that once inputs are received by household, the soldiers would ensure that the inputs are correctly used as directed and sometimes would coerce farmers to utilise the inputs as agreed.

During the educative phase, the capacities of extension workers were built to be able to offer all round extension services package to farmers in the different sub sectors of production. For example, during the introduction of the Unified Extension Approach around 1992, each extension worker was required to possess knowledge in the different sub sectors of crops, livestock, fisheries and entomology even when their professional carrier did not support such a broad assignment. Short courses in integrated extension services were conducted though with minimal success as majority of extension workers chose to tore their specific profession in the extension services delivery. By implication, introducing soldiers without any appropriate trainings in extension services would not be an exceptional intervention as long as short trainings could be offered to them as was the case with extension workers in the educative phase.

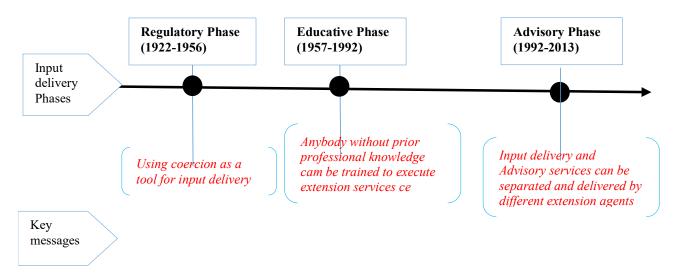


Figure 6. Evolution towards OWC Program

In the Advisory Services phase, the NAADS Act of 2001 introduced the separation of inputs from advisory services delivery to farmers. Initially, NAADS had allocated more resources to advisory services compared to input services in its implementation guidelines. However, farmers realised that advisory services alone were insufficient to improve their household production and productivity unless combined with inputs supply. Whereas farmers wanted inputs to support their knowledge obtained from heavy investments in advisory services over the years, politicians believed that trainings and other advisory services were not as tangible as inputs supply and therefore would undermine accountability of government to the public. More pressure was therefore piled on NAADS by farmers themselves and politicians to prioritise inputs supply over advisory. So, as implementation progressed, there was more resources diverted to input supply than advisory services delivery. By the time the President suspended NAADS including all its staff in 2013, inputs supply was dominant. And, in the absence of extension workers, soldiers were deployed to fill the gap to continue with input distribution, a process that led to evolution of the OWC program to farmers.

## **CONCLUSIONS**

Agricultural Inputs distribution in Uganda has gone through decades of reforms as government and stakeholders push for better alternative approaches to meet farmers' needs. Most of the reforms were championed not by the government and beneficiary farmers but by donors who had the resources to finance the reforms. Government and farmers, therefore, remained on the receiving end with minimal conceptualization of these reforms. Deep in the centre of these reforms was the question of whether inputs and advisory services could be separated or fused and delivered as a package to farmers.

Separating or fusing inputs and advisory services to farmers did not yield any reasonable success in delivery of inputs to farmers for improved production and productivity. Therefore, it is practically impossible to separate inputs supply from advisory services if effective agricultural transformation is to be achieved in farmers' households. Farmers experiences have proved that advisory and input delivery services are complementary functions, none of which would succeed in the absence of the other.

The above notwithstanding, one of the critical factors that negatively influenced the levels of success of the reforms was the weak capacity of the farmers to not only understand what was being prepared for them but also inadequate ownership of the different interventions in the inputs distribution chain.

the Government embraced the Whereas different institutional frameworks to facilitate inputs distribution in the country, harmonization of the different frameworks could not be fully achieved. Several parallel institutional mandates continued to compete with each other for farmers' attention. For example, the NAADS program runs a completely different structure from the traditional unified and single spine extension services as earlier agreed by the same Government. This means that the little resources for inputs distribution got scattered leading to obvious wastage in the distribution chain. A similar parallel structure has persisted under the current OWC program in which the soldiers have their channel of communication while the approved single spine system has its reporting structure.

## IMPLICATIONS FOR POLICY AND PRACTICE

Implications for policymakers. The study on the institutional reforms towards OWC program is contributing to the ongoing struggles and debate among developing countries on how best to deliver extension services to smallholder farmers. Involving the soldiers in inputs distribution is viewed as part of the pluralistic approach in extension reforms being encouraged in Uganda, just as was the successful case in Indonesia. However, the involvement of

the soldiers in inputs distribution in Uganda is being constrained because the program is not properly anchored on any legislative instrument that can facilitate OWC to access resources directly from the government-consolidated fund. As the program continues to access funds through the NAADS Secretariat, it is unable to properly articulate its work plans and budgets before parliament. Development practitioners should therefore reformulate the OWC program by amending the NAADS Act of 2001 to provide for inputs distributions as well as anchoring its input delivery role in the general institutional frameworks for extension services.

**Implications for practitioners**. The reporting procedures between the OWC Secretariat, NAADS and **MAAIF** require urgent harmonization. It was established that the soldiers report directly to OWC headquarters and finally to the Office of the President while the agricultural extension workers are reporting to MAAIF, within the same program. Stakeholders recommended that the reports be finalized at the district headquarters and forwarded by the chief administrative officer to all other stakeholders through a central information management system.

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## STATEMENT OF NO-CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this paper.

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