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## The challenges of the Private Sector Driven Veterinary Extension Services Delivery in the Dairy Sector in Uganda

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### Executive Statement

*The privatization of veterinary extension services delivery in Uganda opened more opportunities for the private sector in the provision of extension services and supply of essential inputs demanded by a growing and more dynamic dairy sector. Consequently, the number of agents profoundly increased – and the markets became flooded with new and untested inputs (from the unregulated private sector). One big setback emerging – relates to the growing efficacy doubts and negative experiences (including losing money or animals) associated with use of inputs on the market, contributing to non-adoption of essential inputs. Selective adoption of essential inputs in dairy farming is also wide spread. The way forward requires impartation of proper and recommended skills in livestock husbandry practices. This will entail building new information dissemination networks by strengthening the capacity to channel veterinary extension support services via farmer groups centred information delivery institutions (co-operatives) - where dairy farmers can easily pick demonstrated evidence on the efficacy of the inputs available on the market from trusted fellow farmers.*



Picture No1: Incalf-Heifers bred on a Keirungi Private Dairy Farm in Western Uganda

### Introduction

This brief provides information on the dynamics and challenges that have emerged in the veterinary extension services delivery system ever since government implemented market driven policies to reform the dairy sector. Information presented is derived from a nationally representative dataset (the 2004 and 2008 National Service Delivery Survey -) collected by the Uganda Bureau of Statistics (UBoS), and complimented by primary data collected during the field study. The brief is an excerpt from the dairy sector transformation report. The choice of dairy is justified by the success of the sector in developing capacity at each node of the milk value chain: inputs level - farm (milk production) level- milk bulking and transportation level - milk processing (value addition) to consumption, reasonably interlinked along the entire value chain. The components of dairy value chain (in this case emphasis is on inputs level) need to be studied and lessons replicated in developing other agricultural value chains.

## Access to Veterinary Extension Services and Essential Inputs

After market reforms in the dairy sector— private sector businesses, cooperative societies, and non-government organisations (NGOs) together with community based organizations (CBOs) seized the opportunity and setup enterprises and institutional networks to provide veterinary extension services and to supply essential inputs demanded by a growing and more dynamic dairy sector. By 2008, the private sector was the second important source of veterinary extension services, and supplier of essential veterinary inputs to compliment the core government public veterinary services (Table 1 and Table 2). NGOs (Heifer International, Send A Cow, and Land O’Lakes) together with community based organizations (CBOs) ranked third in extending veterinary extensions services in the dairy sector. Farmer groups are noted to have a modest impact (12 percent) in extension in the Western region where primary dairy farmers’ cooperative societies are known to be stronger (EPRC Field Work, October, 2011).

**Table 1: Sources of Veterinary Extension Services (%)**

Region	2004					2008					
	Government	Private	NGO /CBO	Other	Total	Government	Private	NGO /CBO	Farmer Groups	Other	Total
Central	65.5	28.6	5.8	0.0	100	54.9	31.5	10.3	1.9	1.4	100
Eastern	65.4	29.7	4.2	0.7	100	64.2	22.9	9.8	0.0	3.1	100
Northern	53.2	36.1	9.6	1.0	100	62.8	18.6	18.7	0.0	0.0	100
Western	67.1	21.7	5.3	0.0	100	56.1	17.6	14.0	12.3	0.0	100
Uganda	62.5	30.8	6.3	0.5	100	58.2	25.1	11.9	3.4	1.4	100

Source: Authors’ calculations based on NSDS 2004 and 2008.

**Table 2: Sources of Essential Inputs in Milk Production at Farm level by 2008**

Inputs Category		2008					Total
		Government Agencies	Private Dealers	Cooperatives	NGOs	Others	
Veterinary Drugs:	Central	38.6	59.8	0.8	0.8	0.0	100
	Eastern	76.3	22.7	0.0	0.0	1.0	100
	Northern	67.5	27.7	0.0	4.8	0.0	100
	Western	32.3	66.7	0.0	0.0	1.0	100
	Uganda	46.7	52.0	0.3	0.7	0.6	100
Artificial Insemination (AI):	Central	89.4	10.6	0.0	0.0	0.0	100
	Eastern	70.1	30.0	0.0	0.0	0.0	100
	Northern	64.0	36.0	0.0	0.0	0.0	100
	Western	56.8	26.6	0.0	16.7	0.0	100
	Uganda	75.5	19.4	0.0	5.2	0.0	100

Source: Authors’ calculations based on NSDS 2004 and 2008



Picture No2: Private Veterinary Inputs vending Shops mushrooming country wide

## Use of Essential Inputs in Milk Production

There is selective uptake of essential inputs in milk production, with a rising (90 percent) adoption of veterinary drugs, and lesser (17 percent) uptake of feed supplements and (9 percent) artificial insemination (AI) services in breeding by dairy farmers country wide (Table 1).

The adoption rate of AI remained rather high in the Central region but on a decline. The Central region has the advantage of being in close proximity with a rich network of AI technical staff<sup>1</sup>, and the decline could be associated with the increased use of bulls as opposed to AI in breeding as alluded in by most farmers interviewed during field work. Likewise the uptake of feed supplements is relatively high in the Central region due to easy access to crop residues, and prevalent high milk price incentives in the region. The selective uptake of essential inputs typifies weaknesses in husbandry practices on dairy farms in Uganda. As more players join in the supply of inputs, the markets are being flooded with new and also poor quality inputs and services which are contributing to a high rate of non-adoption of essential and critical technologies in dairy farming.

<sup>1</sup> The National Animal Genetic Resources Centre and Data Bank (NAGRC & DB) is located in the Town of Entebbe in Central Uganda.

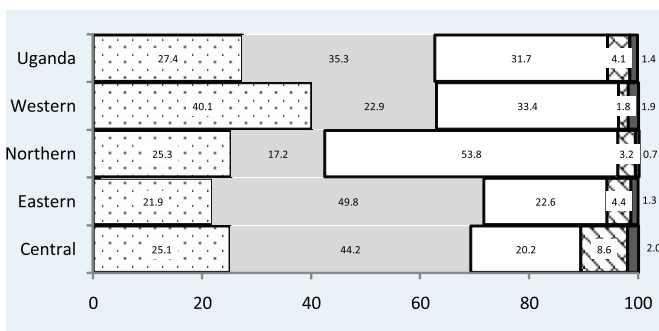
The challenge lies in fostering means for effective participation of dairy farmers in these new economic relationships.

**Table 3: Incidence of adoption of key inputs by households, %**

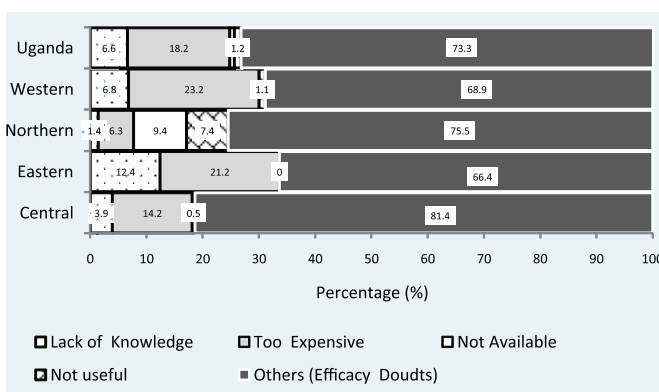
	2004			2008		
	Feeds	Veterinary drugs	AI services	Feeds	Veterinary drugs	AI services
Central	24.2	76.3	16.3	24.9	93.9	13.4
Eastern	12.9	65.3	3.5	14.0	84.2	6.3
Northern	2.5	61.0	2.3	7.0	83.2	3.9
Western	6.5	61.3	4.8	12.6	93.0	8.5
Uganda	12.2	66.2	6.6	16.8	90.5	9.3

Source: Authors' calculations based on NSDS 2004 and 2008.

**Figure 1: Reasons cited for non-adoption of Veterinary Drugs in 2004**



**Figure 2: Reasons cited for non-adoption of Veterinary Drugs in 2008**



Strong reasons (ranging from price, failure to appreciate the usefulness of such inputs, efficacy doubts on available inputs, and the growing knowledge gaps) are advanced for selective adoption by 2004 (Figure 1), but overtime, efficacy doubts became the leading bottleneck in the use of essential veterinary drug (Figure 2). In

the advent mistrust and negative experiences, farmers relied on other farmers, followed by traditional radio programs for market information from trusted sources on essential inputs and technologies (Table 4)<sup>1</sup>. The tendencies of small scale livestock farmers depending on others in search for new information in uncertain situations are well documented by (Toro and Place, 2004)<sup>2</sup>

**Table 4: Changes in the most important source of market information on inputs (%)**

Input category		2008					Total	
		Radio	TV	News-paper	LC Officials	Other farmers		
Veterinary drugs:	Central	11.8	0.0	0.0	1.5	79.1	7.6	100
	Eastern	11.5	0.0	0.0	17.2	52.2	19.2	100
	Northern	20.2	0.0	0.0	11.3	64.3	4.2	100
	Western	8.0	0.0	0.7	2.8	87.3	1.1	100
Uganda	11.2	0.0	0.2	6.1	75.0	7.5	100	
Artificial Insemination:	Central	17.5	0.0	0.0	11.6	68.6	2.3	100
	Eastern	14.9	0.0	0.0	23.6	49.5	12.0	100
	Northern	11.4	0.0	0.0	30.8	57.9	0.0	100
	Western	24.3	0.0	3.3	13.4	53.6	5.5	100
Uganda	17.6	0.0	0.7	17.5	58.6	5.7	100	

Source: Authors' calculations based on NSDS 2004 and 2008.

## Conclusions and Recommendations

The dairy sector is changing in many ways for both farmers and institutions that service the sector with essential inputs and extension. The role of the private sector in availing innovations and technologies on the market is on the rise, but unregulated private sector driven inputs markets and service delivery, increases farmers exposure to risks which can be deterrence in the uptake of appropriate technologies. Therefore interventions through regulation of extension services delivery, where the private sector associated moral hazards are detected are strongly desired from the MAAIF. Farmer groups centred institutions are handy in the transfer of information on technologies where demonstrated evidence on efficacy is required. The traditional FM radios and wider media can be used to widen the veterinary extension information dissemination. NGOs with proven expertise in specific

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agricultural technologies can bridge the gap for capacity building where public extension support services prove inadequate. Farmers are rational and resort to selective adoption of innovations leaving out technologies where incremental production costs outstrip additional income benefits (as was in case of feed supplements in dairy and AI services).

## Endnotes

- 1 Toro, E. M and Place, N. T (2004). Perceptions of Livestock Extension Education Delivery among Dairy Producers in the Northern Coast of Honduras. Department of Agricultural Education and Communication, University of Florida. in the AIAEE, Proceedings of the 20th Annual Conference. Dublin, Ireland.
- 2 Toro, E. M and Place, N. T (2004). Perceptions of Livestock Extension Education Delivery among Dairy Producers in the Northern Coast of Honduras. Department of Agricultural

Education and Communication, University of Florida. in the AIAEE, Proceedings of the 20th Annual Conference. Dublin, Ireland.

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