



Constraints to the use of artificial insemination service and possible solutions

The East Africa Dairy Development (EADD) project is a regional industry development program implemented by a consortium of partners led by Heifer International. It is currently being piloted in 18 sites in Kenya, 8 in Rwanda and 27 in Uganda. The overall goal of the project is to transform the lives of 179,000 families, or about 1 million people, by doubling household dairy income in 10 years through integrated interventions in dairy production, market access and knowledge application.

This brief highlights key results of a baseline survey that was carried out with the objective of analyzing the level of preference for and use of artificial insemination (AI) in different project sites, and identifying constraints or problems hindering the optimal use of the service and possible solutions. Details are available in the baseline survey report No. 2.

Baseline survey methodology

Why: To assess the baseline situation of dairy farmers and their communities at the start of the project, and to identify key constraints dairy farmers and market agents face and opportunities for overcoming them through targeted project interventions.

When: Part 1: September to November 2008. Part 2: July to August 2009

Where: Three project sites in Rwanda and five each in Kenya and Uganda; two control sites in Kenya and one each in Rwanda and Uganda

What: Community, household and market agent surveys

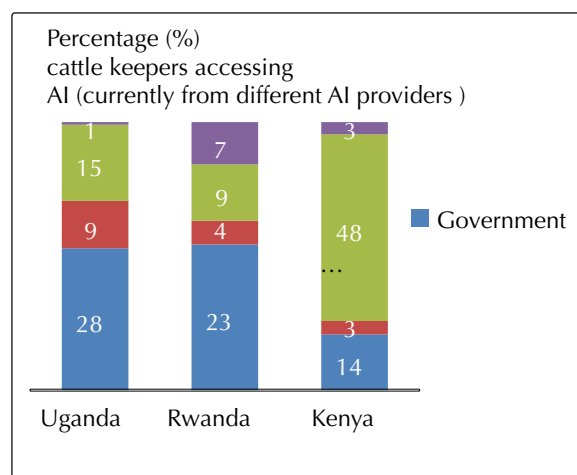
How: 75 households and 20 market agents sampled per site. Focus group discussions for the community survey; structured questionnaire for the household and market agent surveys.

Breeds kept

In all three countries, Holstein-Friesian (cross) was the most widely kept exotic breed (55.6% of households in Kenya, 30.1% in Rwanda and 16.4% in Uganda). However, almost half (49.6%) of households in Kenya also kept Ayrshire crosses. Among the local breeds, Ankole and Nganda were the most widely kept by households in Uganda (34.9% and 16.9% of households, respectively), while in Rwanda and Kenya the most widely kept local breeds were Ankole (88.2%) and local Zebu (28.9%), respectively.

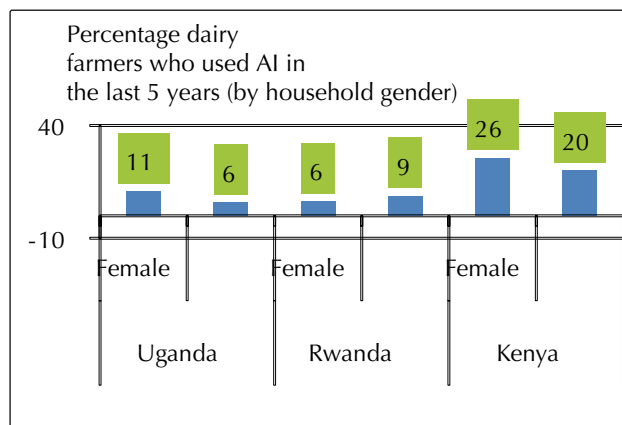
Breeding services preferred

Overall in all three countries, households preferred to use bull service over AI. However, there were a few hubs where a greater proportion of households preferred AI; these were Mukono in Uganda, Bwisanga in Rwanda and Kabiyet in Kenya.



Access to AI services

Currently, AI services are mostly provided by private practitioners in Kenya while in Uganda and Rwanda, the government plays the lead role in provision of these services. In Uganda, the present scenario reflects a shift from five years ago when private practitioners and non-governmental organizations were the main providers of AI services. In Kenya private practitioners still play the key role in provision of AI services as they did five years ago, while the situation in Rwanda remains unchanged with the government acting as the primary provider.



Use of AI services

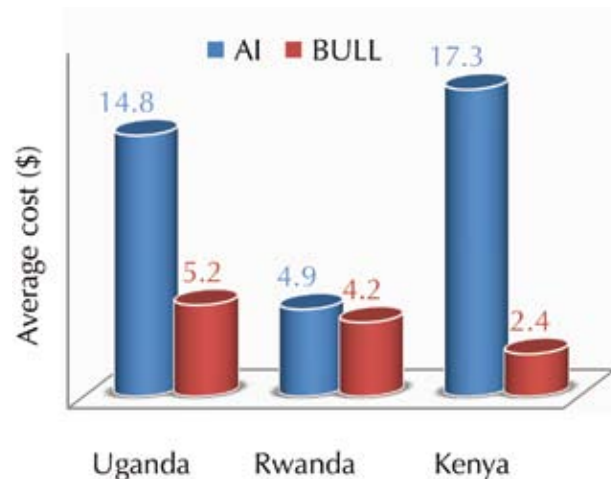
In all three countries, over 80% of cattle keepers reported not using AI in the last five years. More female-headed households in Kenya and Uganda reportedly used AI in the last five years as compared to their Rwandese counterparts.

At the hub level, use of AI was generally low with most livestock farmers preferring natural service. The main constraints to adoption of AI include low availability of the service; high cost; low capacity of farmers and technicians to effectively use the technology; inappropriateness of the technology in meeting farmers' needs; lack of cash to pay for AI services; and lack of support services such as veterinary and extension services.

Cost of breeding services

Across all three countries, the average cost of AI was higher than that of bull service, with marked differences observed in Uganda and Kenya as compared to marginal

differences in Rwanda. Kenya recorded the highest average cost of AI (USD 17.3) and Rwanda the lowest (USD 4.9). The relatively lower cost of AI services to livestock farmers in Rwanda is due to the fact that the government there covers over two-thirds of all related costs. With regard to bull service, the average cost was highest in Uganda and lowest in Kenya.



Key solutions suggested by farmers to increase use of AI were:

- Infrastructure development and improved supply of external inputs such as setting up of AI and veterinary shops, provision of semen storage facilities and equipment, and setting up of technicians' bases; and
- Capacity development of farmers and technicians; this includes re-training of AI technicians and training of community-health and farmers to increase their awareness on benefits of AI and good dairy breeds and breeding practices.

J. Mburu, J.M.K. Ojango, K. Kariuki and I. Baltenweck

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For more information, contact Julie Ojango (j.ojango@cgiar.org) or visit the EADD project website at <http://eaddairy.wordpress.com>

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International Livestock Research Institute

P O Box 30709, Nairobi 00100, Kenya
Phone + 254 20 422 3000, Email ILRI-Kenya@cgiar.org

P O Box 5689, Addis Ababa, Ethiopia
Phone + 251 11 617 2000, Email ILRI-Ethiopia@cgiar.org

www.ilri.org

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