

The quest for compromise between efficiency and inclusion in milk collection systems

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Dairy processors and their associated collection system are in a co-evolution scheme and organizational innovations boost the extension of milk collection radius. However, innovation, which is sometimes exclusive, encourages stakeholders to seek compromises.

Africa-Milk project supports the establishment of efficient and inclusive milk collection systems, i.e. guaranteeing the milk supply in quantity, quality and regularity, but also open and accessible to local producers and collectors.

The collection systems studies carried out in 2019 in the four countries of the project (Senegal (SN), Burkina Faso (BF), Kenya (KN) and Madagascar (MD)) aimed to characterize the organization and management of nine milk collection systems, with a focus on collection practices, services associated with collection, the difficulties and needs of stakeholders.

Three types of milk collection systems with specific dimensions and modes of organization have been highlighted at the BF, SN and MD (for the KN the study is underway).

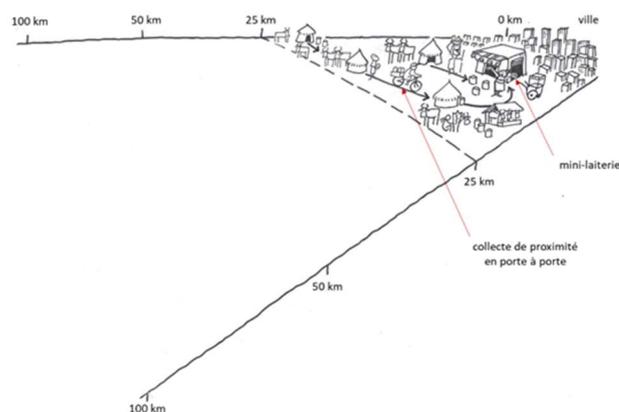
The "S size" system concerns mini-dairy processors (less than 500 l / d), such as Bonnet Vert (BF). Suppliers are few and the collection is carried out near the dairy (<25km), door to door, with bicycles or motorcycles, often by direct delivery from farmer to processor. The dairy processor knows each supplier individually and can grant credit to its most loyal suppliers on a case-by-case basis (payment advances, credits for feed concentrates, etc.). No written contract in this system where everything is based on trust between the dairy processor and its suppliers.

The "L size" system concerns mainly intermediate size dairies (500 to 5,000 l / d), such as Banfora dairy (BF) or La laiterie du Berger (SN). In this system, collection is more efficient, thanks to a greater number of collection axes, to a greater geographic extension of the axes on the territory (50 km from the dairy), to the establishment of collection points along the axes, and to the motorization of the collection. Stakeholders establish organisational bodies to discuss the implementation of innovations for improving collection (establishment of cooperative of producers, mini-farms, collection centers, services for producers, introduction of computerized payment, etc.).

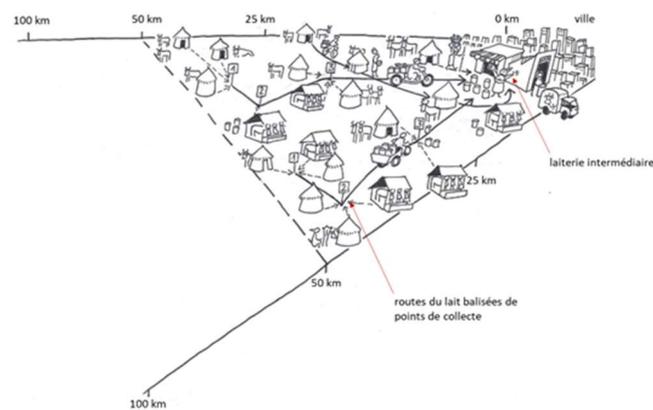
The "XL size" system concerns mainly industrial dairies (> 5,000 l / d), such as Socolait (MD), Kirène (SN), and sometimes smaller processors like Sodimilk (MD). Milk is collected in several areas by collection centers equipped with refrigerated tanks and vans. The dairy and collection centers have generally signed a written contract, which

may include bonuses for quantity and quality. However, upstream of collection centers, relations with suppliers generally remain informal. Some centers offer payment advances to retain their suppliers. Quality management raises more problems with the lengthening of the collection radius and the lack of traceability of intermediaries. In some cases, stakeholders are discussing to establish quality based milk payments.

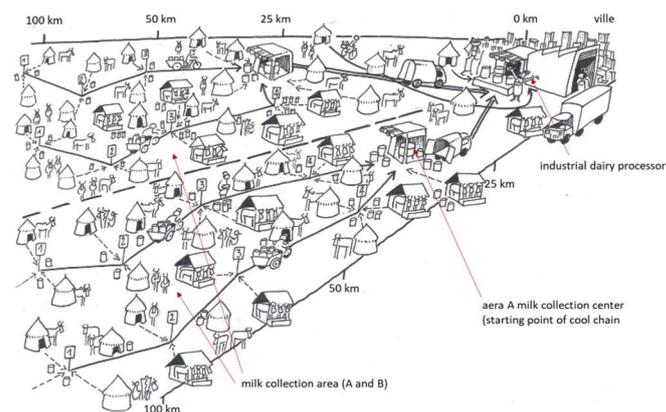
The enlargement of collection generally goes hand in hand with a more complex collection system, adding problems of logistics, quality management difficulties, and needs for written contracts. Face to these issues, stakeholders have to compromise in order to maintain a milk collection that is both effective and inclusive.



"Size S" milk collection system



"L size" milk collection system



"Size XL" milk collection system