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4s2a: Food system transitions in deltas under pressure

Effects of salinity on dairy farms in Bangladesh

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Dairy products are an important source of protein and income in Bangladesh. In coastal communities the majority of the women of the poor families' livelihoods depends on livestock rearing and milk business. In these areas it is known that salinity has negative effects on cow health and, consequently, on the productivity of dairy cows. However, it is unclear which factors are more or less influencing these negative effects. Only with such information adaptation measures can be developed. In order to develop adaptation measures to address the ongoing and future challenges in the coastal areas of Bangladesh a better understanding on the current effects of salinity on livestock production is necessary. Moreover, current developments on improving dairy production systems in Bangladesh cannot be successful when adaptation measures to salinity are not incorporated.

Effects of salinisation on dairy production can differ per region and depend on a number of factors such as farm management, quality of the water, condition of the animal, animal breed and origin, animal diet, and feed quality. Furthermore, salinity not only affects dairy production negatively through the drinking water but also through feed provision. Soil salinity is the most limiting factor for feed production that lowers the productivity of cow both quantity and quality of milk per cow.

This research aims to better understand the effects of salinity on dairy farms. In Bangladesh three regions have been selected that have been facing and will be faced with increasing salinity intrusion in the near future. Within these regions an overview has been made on the number of dairy farms. For each of these regions ten dairy farmers have been interviewed on their experience and knowledge on salinity issues.

Keywords: Bangladesh, salinity, livestock production, Delta's under pressure