

ABSTRACT

Due to high perishability, African indigenous leafy vegetables (AIVs) tend to suffer heavy postharvest loss. There is a lack of information regarding management of loss of these vegetables. This study sought to identify, and assess, types and causes of AIV loss in the supply chain. The study was done across the AIV producing location of Nakuru, Kisii, and Kakamega, in Kenya, involving 45 AIV farmers from each location. Parameters studied were socio-demographic profiles, harvesting, transportation, and marketing in relation to postharvest loss. The AIV production is primarily by women who were mainly smallholder farmers. Major problems identified were inappropriate harvesting and handling techniques, inadequate postharvest treatment and preservation methods, poor roads, lack of cold storage facilities, unhygienic market conditions, and lack of implementation by regulatory bodies on AIV handling, quality, and safety standards. Values were affected by location and supply chain stage. Yellowing, wilting, presence of foreign bodies, mechanical damage, and insect pest and disease damage were major postharvest problems along the supply chain. On average, farmers experienced loss between 10 and 50% with some experiencing >50%; this varied with location and supply stage. Short AIV shelf-life (1–2 d) is a major concern. Postharvest loss is unique for specific locations and supply chain stage, and attributed to AIV production, harvesting, handling, distribution, and marketing dynamics.

KEYWORDS:

- Food loss
- food waste
- food quality
- Kenya
- shelf-life