



Value chain analysis of Kunun zaki in Nigeria

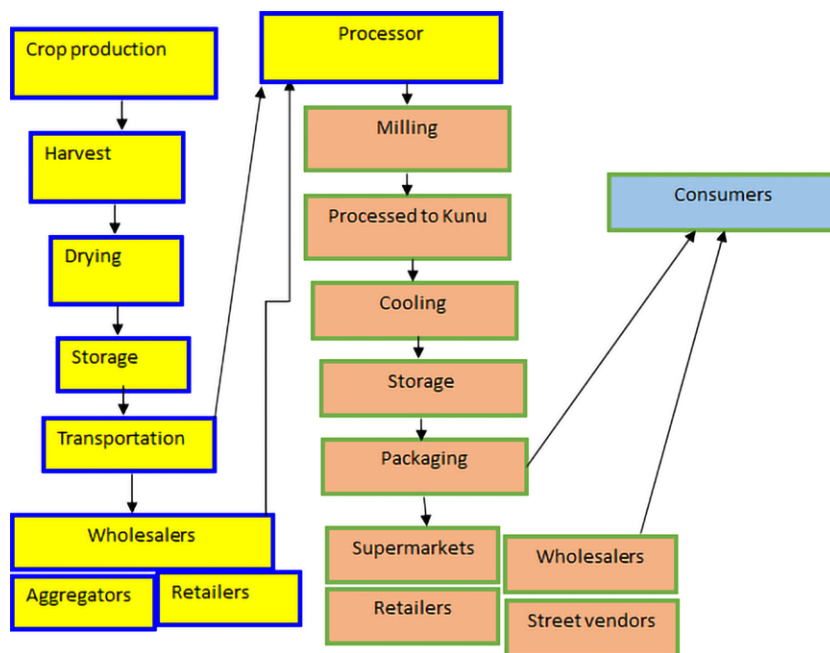
Background. Kunun zaki is a popular non-alcoholic cereal drink that is consumed in northern Nigeria. It serves as breakfast, appetizer, medicinal remedy, and is also consumed during social gatherings. The cereals used are millet, sorghum, and maize in decreasing order of preference.

Objective. The main objective is to provide a general overview of the Kunun zaki value chain in Nigeria and to describe the product process and characteristics.

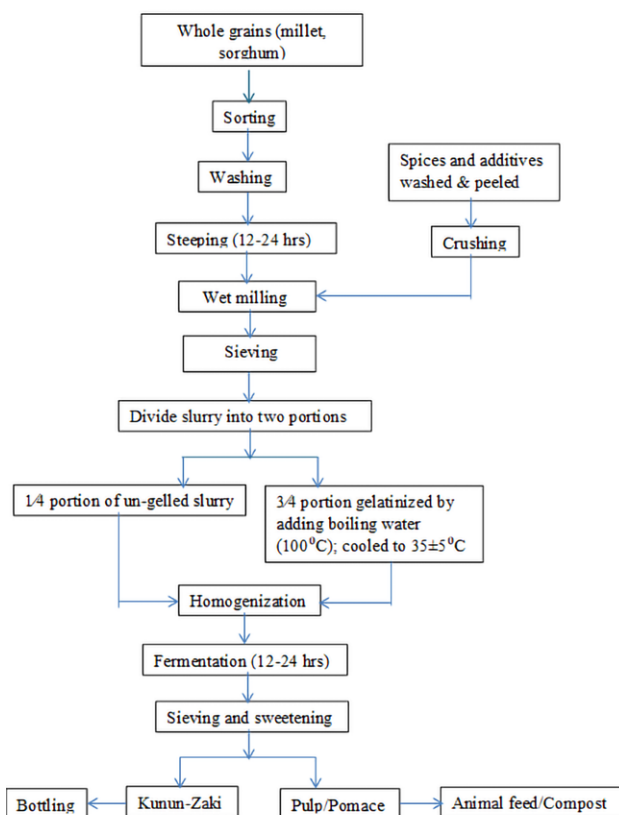
Results. The traditional production process involves steeping the sorghum or millet (sometimes maize or rice) grains. The duration of steeping depends on the cereal used and may vary between 12 hours for millet/sorghum and 72 hours for maize. Grinding of the steeped grains mixed with spices is done with local milling machines and part of the slurry (3/4 volume) is gelatinized with boiling water. The remaining part of the slurry (1/4 volume, non-gelatinised) containing liquifying agents is mixed with the gelatinised portion when the temperature is about 60-70 °C. The mixture is left overnight at room temperature for spontaneous fermentation and filtered using a local sieve the next morning. Faster and more modern processes produce Kunun zaki thanks to ready-to-use millet or sorghum flour, which reduces the processing time from 120 hours to 10-12 hours.

The main signals pointing to quality issues with Kunun zaki are the change in the colour of the final product, the visual development of mould and an unpleasant taste and/or odour. The main hazards known to the stakeholders in the Kunun zaki value chain include mycotoxins, bacterial hazards, and physical hazards. Two case studies consisting of two groups of interconnected business operators within the Kunun zaki value chain have been selected.

Recommendations . An in-depth analysis of the case studies, based on a multi-dimensional approach by a team -including socio-economists, microbiologists and food technologists- will lead to recommendations.



Kunun zaki value chain



Kunun zaki production process