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## 1. The products

*Jaabi* is, in Cameroon, the local name of the fruit of jujube tree (*Ziziphus mauritiana*), a wild tree, largely spread in the savannah region of the country. The fruit is harvested dry and mainly consumed as side-dish. Four varieties of fruits are recognized and locally called: *jaabi lammuji*, *jaabi dakamji*, *jaabi hadinga* and *Kurnadje*. Due to their sweet taste, only *Jaabi lammuji* and *Jaabi dakamji* are the varieties consumed. Out of the use of dry *jaabi* fruits as side-dish, they are mainly processed in a cake, locally called *Yaabande* (a round biscuit like product). This activity is the panacea of women

## 2. Processing of *Jaabi* into *Yaabande*

*Yaabande* cake is produced, using exclusively *Jaabi lammuji* and *Jaabi dakamji*. The processing goes through pounding of dry *jaabi* fruits to obtain flour, which is molded and processed (steam cooking, stifle cooking or sun drying) into *Yaabande*. In general, the cake is produced using only *jaabi* flour, without additional ingredients. Meanwhile, some producers add honey during molding.

Whatever the processing method, the main operations involved are successively: sorting of grains, pounding of clean grains in a mortar, sieving to obtain fine flour, molding of the flour and cooking. The variability of the methods is mainly based on the procedure used to pack and to cook the cake. In general the flour is sprinkled with water, then either molded using small calabash or wrapped in vegetal leaves. The cooking is either, stifling under earth (Kapsiki method), or steam cooking (Guiziga method), or sun drying (Kanuri method). Steam cooking and stifling methods are the most encountered. Depending on the quantity of *jaabi* processed, the production of *Yaabande* cake is undergone in 1 to 4 hours.

## 3. Quality attributes of *Yaabande* and constraints

The main quality attributes of *Yaabande* are its texture (fineness, firmness, compact, homogeneity) and its colour (brown clear). These attributes are related to the good processing practices, and may be affected if these good practices are not respected. In this respect, taking into account the processing steps, the fineness of the cake is build from the pounding of flour, while the color result from the original color of *Jaabi* fruit, and may be affected by cooking conditions (cooking time, water condensation during steam cooking). Thus the main problems experienced during *Yaabande* processing are:

- Burned cake due to excessive cooking, particularly in the stifle method. In steam cooking, long time cooking results in a dark brown color. In both cooking practices, long time cooking yield also hard cake, while the good *Yaabande* cake should be firm, without crumbling, but not too hard
- Water hole on cake, due to water condensation during steam cooking

- Presence of dust, inherent to environmental conditions. This problem occurs regularly in stifle method, when the wrapping of the cake in vegetable leaves does not isolate completely the cake from contact with earth. In addition, processing activities are done outside; thus product processed (flour particularly) are expose to win which carry dust. This may also affect the hygienic quality of the cake.

## 4. Conclusion

Mastering the quality of *Yaabande* implies mastering the constraints associated to its processing. The processing factors to be considered in this respect concern:

- optimisation of pounding, in order to obtain flour of convenient fineness for *Yaabande* processing
- optimisation of cooking conditions, particularly the cooking time with resêct to color and texture
- hygienic conditions. In this respect, report on the quality of *Yaabande* (D4.1.3.3) showed that traditional products from *Jaabi* are not conforming microbiological quality.

The reengineering of the traditional processing of traditional *Jaabi* products will tackle these aspects.