

## Women-Owned Enterprise Combines Technology and Food Safety for Fruit Processing Invention

Senegal is home to an emergent fresh fruit and vegetable sector that employs many women, from production to retail. Despite challenges in maintaining quality throughout the product lifespan, there are growing markets for fresh fruit and vegetables, like “ditax”. Ditax, or Detarium Senegalese J.F. Gmel, is a forest tree found in Senegal whose fruits are locally called ditax in Wolof. Ditax is rich in vitamin C and widely consumed in Senegal as a drink, marmalade, sorbet or fresh. Traditionally, small businesses have processed ditax using a pestle and mortar, which is challenging for the women who are most represented in the fruit sector. In addition, processing ditax by hand results in inconsistent texture, quality, and safety of the finished product.

Nafissatou Diop, an agrifood research engineer and entrepreneur working at Senegalese Food Technology Institute, set out to improve fruit processing. She is the owner of Senfruits Processing Technology, a company that specializes in the processing of local agricultural product, including ditax. To improve the technical capacity and food safety standards of her production, Nafissatou partners with Feed the Future Business Drivers for Food Safety (BD4FS), funded by USAID and implemented by Food Enterprise Solutions. BD4FS trained Senfruit employees and management on pre-HACCP (Hazard Analysis Critical Control Points), which are a basis for safe and hygienic food handling. Throughout the training process BD4FS food safety experts provided Nafissatou with technical assistance to successfully implement the prerequisite programs in her company.



*Mrs Nafissatou Diop, Founder of Senfruit Technology Processing, presenting the ditax pulper. Photo Credit: Marieme Niang, FES*

Combining her expertise as a food engineer with the knowledge she gained from BD4FS technical assistance, Nafissatou invented a “de-pulping” machine specifically for ditax, which has an especially hard skin and pulp that other de-pulpers could not completely process. Through this technological innovation, Nafissatou and Senfruit have implemented an efficient processing method while maintaining a high standard of product integrity and safety. For her invention, Nafissatou received a prize from World Intellectual Property Organization (WIPO) and Senfruit produces ditax pulp in industrial quantities.

Nafissatou is planning to continually improve her operation by participating in the BD4FS pre-HACCP validation badge program. Earning a BD4FS pre-HACCP badge validates that Senfruit has implemented food safety standards. This can help Nafissatou gain access to new markets and increase her sales. As she

explains: "Like many small and medium enterprises, our company could not afford to pay for a training on food safety; the pre-HACCP Validation training provided by BD4FS for my employees and myself helps us to produce better quality food."

Senfruit is one of the 300 Growing Food Businesses supported by BD4FS to improve product quality and develop market access. To date, 79% of project participants have been women. BD4FS is proud to provide women agrifood professionals with training, technical support and assistance in finding business opportunities.

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