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"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

## Schools food environments in Boukombe and Natitingou and students' perceptions about these environments

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## Abstract

The food environment is recognised as having a strong influence on the eating habits of individuals. At adolescents' level, school-based nutrition interventions are an important framework for examining environmental strategies to improve healthy food choices among youth, particularly with the intake of fruits and vegetables. This study aimed to analyse the food environment of main colleges of Boukombe and Natitingou, which are situated in high food insecure communes in North-Benin, and the college students' perceptions about these environments. All outlets and fruit trees publicly accessible within one-kilometer radius of the schools were mapped. An inventory of the outlets was added. Individual interviews were conducted with 300 students using a perception questionnaire. Overall, 96 outlets and 32 fruits trees were geocoded in Boukombe. The inventory showed that vegetables (20.5%), cereals (13.9%) and dried fish (9.9%) were the most represented food groups on offer. Fruits were available in only 7.3 % of outlets. Mango trees are the most represented (65.6%). The perception of the students indicated that, it is difficult to find healthy fruits and vegetables around their college (82.4%), and that fruits and vegetables are expensive (72.6%). Natitingou college food environment was composed of 61 food outlets and 17 fruits trees. The most important food groups on sale were cereals (23.8%), vegetables (13.4%) and sugar products (10.5%). Mangoes are the main fruit trees (58.8%). Here, 58.5% of students thought that it is easy to buy fruits and vegetable in their environment and 53.5% that they have a large choice/diversity of fruits and vegetables. In the other hand, 41.5% thought that fruits and vegetables are expensive. All students at both colleges consumed mango when its season come and thought that it is the most available and accessible during this period. Most fruits available on the food outlets are imported. The school food environment in both Natitingou and Boukombe communes is a real challenge especially regarding diversity and financial accessibility of fruits and vegetables. Thus, it is important to take actions such as implementation of school gardens to improve the availability and accessibility of fruits and vegetables for students.

Keywords: Benin, food choice, food outlet, fruit trees, fruits and vegetables, students

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