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## How to Catch ‘low-hanging’ Fruits and Vegetables in Uzbekistan?

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### Abstract

Fruit and vegetables are essential components of a healthy diet thanks to their macro- and micro-nutrient content, and their adequate consumption could help prevent major non-communicable diseases. The natural and climatic conditions in Uzbekistan provide ample opportunities for the development of fruit/vegetable production. Unfortunately, consumption of such healthy food is constrained by its seasonal and spatial availability and considerable price differences throughout a year. The purpose of this complex research is to study how healthy is the current diet of Uzbek people in terms of seasonal fruit/vegetable consumption and its macro- and micro-nutrient content. The research aims also to explore existing constraints and opportunities to improve year-long availability of fruit/vegetables as a key determinant of healthy diet. Econometric analysis of population data allowed to study various interactions related to healthy diet at individual level. Multi-stage stratified cluster sampling approach was utilised to conduct a household survey in summer 2014 and the repeat survey in winter 2015 with sample size of 200 households in five districts of Tashkent province. Functional and institutional analyses of fruit/vegetable value chains allowed qualitative studying of the existing constraints and required policies. A sample size of 100 fruit/vegetable farms in five districts of Tashkent province was selected randomly, disproportionally for conducting structured interviews which took place in winter 2014. Based on the research results, interseasonal price variation and the inability of households to smooth their annual fruit/vegetable consumption manifest themselves in seasonal variation in macro- and micro-nutrient intake. Intake of important micro-nutrients as a result of fruit/vegetable consumption is very low even in summer season. Consumption of energy-dense (often, less healthy) food still prevails in Uzbek diet, which can be partially explained by culture. Among the main problems of efficient fruit/vegetable production are output market failures, input market failures, institutional bottlenecks, and degraded natural resources. Recommended policy changes include reduction of state bureaucracy and abuse of power, shift from planned system to market-oriented system, removal of export restrictions, better marketing research, knowledge capacity development, investment in new equipment, technologies and infrastructure (indoor production, storing and processing), development of agricultural extension services and effective work of associations.

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