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Genetic Resources of Trpoical and Subtropical Fruit and its Role for Agrobiodiversity and Food Security in Bangladesh

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Abstract—Bangladesh has many indigenous plants which are less utilized in agriculture genetic resources. Many of these plant species warrant further attention: they are more resilient to environment stresses such as droughts, can withstand salinity and poor soils better than many domesticated species and provide important additional nutrients to the local diet. A major threat to Bangladesh's future agricultural production is posed by the effects of global climate change. Its effects are already evident from variations in rainfall patterns and increased severity of floods in South Asia. The implications are not only localized disasters which ruin the livelihoods of the affected families, there is likely to be a large-scale loss of productivity in the medium to long term, contributed to by a likely deterioration of soil structure and quality, changes in cropping seasons and planting windows and resulting decline in productivity and yields. Considering the current development problems in Bangladesh such as poverty and malnutrition, underutilized fruit trees that are indigenous and adopted to the country are important genetic resources for addressing these problems. These fruit tree species are good sources of food and important vitamins and minerals. The development of improved varieties and new products or by-products, and the expansion of planting of these underutilized tree species hold a great potential for improving nutrition and food security.

Keywords: Genetic resources, tropical and subtropical fruits, underutilized fruit trees, salinity, global climate change, malnutrition, agrobiodiversity, food security.

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