

PRESENT STATUS, PROBLEMS AND PROSPECTS OF ROOFTOP GARDENING IN SOME SELECTED AREAS OF DHAKA CITY

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Executive summary

Dhaka city has a huge population and total rooftop in Dhaka city is around 7000 (Islam and Ahmed, 2011). So, it was quite impossible to collect data from all of them. So a research was conducted i) to describe the socio-economic characteristics of the rooftop gardeners; ii) to document of vegetables and fruit species produced rooftop garden; iii) to record the perishable products either own consumption or for sale on rooftop gardening; iv) to diagnose the problem faced by the rooftop gardener; and v) to find out the general, environmental prospects & ecosystem service of the rooftop gardens. The study, conducted from 20 January 2021 to 30 February, 2022. The study was conducted with randomly selected 100 rooftop gardeners in Dhaka City (DSCC has 75 wards and 10 regions, study area is divided into 6 groups from Dhaka city, among which 4 areas from DNCC representing wards 28, 29, 30 and 31, consisting areas of Mohammadpur, Shayamoli Adabor, Taltola under region 5 and Dhanmondi and Kalabagan are from DSCC which fall under 49, 50 and 51 wards from region 1). The researcher used Microsoft Excel as data analysis tools for BCR calculation and STATA statistical software for analyzing other statistical procedure. The result showed that about 58% old aged people (above 50 years) involved in Rooftop gardening. Average value of production cost of vegetables, fruits, flowers and other ornamental plants were 12020 tk. and market value were estimated 17670 Tk. The Benefit cost ratio was 1.50 Tk. That means Per 1 Tk, invested the return will be 1.50 Tk. According to Problem Faced Index (PFI), the extremely severe economic problems was high initial cost (Score 2.00 out of 3.00), physical problem was lack of availability of quality container (score 2.25), technical problem was irregular monitoring (score 1.86). The strongly agreed general prospect was willingness to participate in training (score 2.81), environmental prospects were environmental temperature mitigation (score 3.00) and cooling environment (score 3.00), ecosystem service prospect was regulating service (carbon sequestration, water regulation) score 3.00 out of 3.00. The research concluded that rooftop gardening in Bangladesh enhances food security and environmental health, but lacks clear policy, with challenges like high initial costs, poor containers, and pest control.

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