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Farmers’ Use and Preferences of Trees in Kurdistan Region of Iraq

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Abstract

Trees play an important role in virtually all the natural ecosystems. Most of the trees have multiple uses, and they offer a range of valuable products such as fruits and service roles such as windbreaks, to the rural farmers and local people. The study aimed to identify the most important use of tree species by the farmers in Iraqi Kurdistan along with their preferences among the species as well as to evaluate the abundance of species. The methodology was based on the studies developed by World Agroforestry Centre (ICRAF) and International Service for National Agricultural Research (ISNAR) with appropriate modifications to the study conditions. The fieldwork was carried out in Erbil province of Iraqi Kurdistan from August until October 2017 in both lowland and highland areas. Altogether, 62 respondents were interviewed by semi-structured questionnaires and 46 tree species were identified in both regions. The results showed that fruit trees (grapes *Vitis vinifera*, olives - *Olea europaea*, pomegranate - *Punica granatum*, figs - *Ficus carica*, and apricots - *Prunus armeniaca*) are used extensively in both regions. Farmers relied mainly on fruit trees of various species due to high market profits and income generation. Besides that, farmers were generally focused on windbreaks as a service role in the lowlands. Regarding the species preferences, olives had a significantly high priority among the farmers in the lowlands, while the pomegranates were higher preferred in the highlands. Our study suggests, further development of agroforestry systems in Erbil could be an important factor in mitigating effects of climate change, especially in the case of increasing temperature. Better tree pruning and spacing may reduce the heat and thus save both fruit harvest quality and quantity. In the future, more studies should be conducted on farmers tree preferences and market value chains.

Keywords: Agroforestry, Erbil province, highland region, Iraqi Kurdistan, lowland region, sustainable development, tree priority, use of the tree