

FACTORS AFFECTING ECONOMIC SUCCESS OF GOAT KEEPING IN SOUTHERN JORDAN

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ABSTRACT

Goat production is an integral part of farming systems in Jordan where goats represent basic assets for rural livelihoods. Water is a crucial input for animal productivity and in Jordan water scarcity considers an important bottleneck limiting livestock production. This study aimed to assess the contribution of water costs to the economic performance of goat production under different production systems in southern Jordan. Data were collected from a total of 120 purposely selected goat keepers from June to October 2012 using a survey based on structured questionnaire. Indicators for the goat economic performance were gross margin (GM), benefit-cost ratio (BCR) and net benefit (NB). Feed shared the highest cost of the total variable costs (75%) followed by transportation of water and feed (12%), labor (9%), veterinary (4%) and water costs (0.2%). The total variable costs were significantly ($P<0.05$) higher in the transhumant system than the sedentary system. In the transhumant system, the one-way mean distance and the corresponding time to the water sources were significantly ($P<0.001$) higher with 6.7 km and 25.2 minutes, compared to 2.8 km and 9.9 minutes in the sedentary system. The significantly longer travel distance to fetch water from water sources sites in the transhumant system was associated with a significantly higher transportation cost, i.e. higher fuel and labor costs, than in the sedentary system. In the transhumant system, household heads were primarily responsible for fetching water for goats followed by hired labors, while in the sedentary system hired labors were predominantly in charge of fetching water. Only transportation including water and feed, and labor costs per flock and head showed a significant ($P<0.01$) impact on GM. NB per head was significantly higher in the transhumant than in the sedentary system. The sedentary system showed a slightly higher benefit-cost ratio than the transhumant system ($P>0.05$). In spite of higher water transportation cost in the transhumant system, goat production is profitable and economically viable in both systems.

Keywords: Gross margin, net benefit, water scarcity, goat economic performance, Jordan