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## Current Situation of Gum Arabic (*Acacia senegal*) Production Systems in North and South Kordofan States, Sudan

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### Abstract

The current study covered three villages having good potential of gum arabic (*Acacia senegal*) production in North and South Kordofan States. It aimed principally to analyse current situation of gum arabic production chain. Primary data were collected through field survey conducted using a purposively structured questionnaire that was designed, pretested and distributed to randomly selected 75 gum arabic producers, besides interviews with key-informants. Secondary data were obtained from relevant sources including scientific papers, books and reports. Data analysis was accomplished using Statistical Packages for Social Sciences (SPSS version 11.5) and Excel software to develop charts and pie shapes. The outcomes were displayed in tables showing descriptive statistical results in terms of frequencies and percentages. The study findings showed that gum arabic production ranks first among economic activities in the study area; this is according to almost half (49.3 %) of target respondents. Based on 46 % of interviewees, the agro-silvopastoral system was found to be the most dominant farming pattern in the study sites. Majority of respondents (76 % and 72 %) are land holders in two villages. Significant variation ( $p < 0.05$ ) was revealed between the three selected sites with regard to land use and land ownership. Majority (81.3 %) of the respondents stated that the main causes of variation in tapping dates of gum trees are connected with physiological factors associated with tree maturity. Greater part (70 %) of labour forces involved in gum arabic production in the study area was native gum producers. Highly significant differences between the three sites were indicated with respect to costs of tapping and picking. The study concluded that credit facilities and extension services are limited for the small gum producers in the area. Provision of adequate and timely finance and training of gum producers for integrated resource management are highly recommended.

**Keywords:** Agro-silvopastoral production system, gum arabic production systems, integrated resource management, native gum producers, physiological factors, production chain