

"Biophysical and Socio-economic Frame Conditions for the Sustainable Management of Natural Resources"

## The Characteristics and Performances of Sonok Compared to Karapan Cows as Important Consideration for Conservation of Madura Cattle

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## Abstract

Madura cattle are a prominent example of local cattle in Indonesia. These cattle were formed from crossing of Bali, Ongole and Javanese cattle in Madura island, Indonesia, starting around 1500 years ago. The uniformity of the breed was developed through tuft selection by the people in Madura. The social and cultural values of Maduranese embedded with the existence of Madura cattle. There are two cultural activities that involve Madura cattle, there are Sonok and Karapan. These are identify markers of the Maduranese throughout Indonesia.

Sonok is a heifer/cow contest for which good heifers and cows are selected based on their exterior performance. Karapan is a colourful male cattle race held every year after harvest season. Karapan cattle are mostly produced in an isolated district, where Madura cattle are conserved pure. The cattle here are threatened by inbreeding. While Sonok cattle are produced in other districts, where crossbreeding with exotic breed also occurs.

The aim of this study was to explore the characteristics and reproduction performances of Madura cows that produce progeny for Sonok and Karapan cattle.

Twenty five heads of cows which produce Sonok cattle and 39 heads of cows which produce Karapan cattle were measured and judged of their exterior performance. A total of 55 Sonok and Karapan cow owners have been interviewed to obtain the reproduction performance of the cattle. The officials in the Sonok contest and Karapan race have been interviewed to reveal the criteria applied to select cattle used for those activities.

In general, body size of Sonok cows was bigger than that of Karapan cows. The differences on the body size of Sonok and Karapan cows can be explained by several factors, such as selection within breed and management by farmers. Selection criteria for Sonok emphasize on exterior performance, while for Karapan, only on their speed of running. Reproduction performances of Sonok and Karapan cows are relatively high. Cultural practices in keeping Sonok cattle and criteria applied to select it, can be considered for conservation Madura cattle.

Keywords: Cattle, conservation, Madura cattle, Sonok cattle, Indonesia

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