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Aceh Cattle: Between Tradition and the Need of Sophisticated Breeding Strategy

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Abstract

Aceh cattle are another Indonesian native breed with still unknown about its origin. They carry the mixture of *Bos indicus*, *Bos javanicus* and a little bit of *Bos taurus* in their genetic constitution. Aceh cattle play important role on livelihood of the farmers and mostly preferred for traditional event, ‘meugang’ (beef-feast event), which held three times in a year. This article discusses the phenotypic variation within Aceh cattle breeding centre population as well as between the breeding centre and the common Aceh cattle owned by farmers. In total 995 records were obtained from Aceh Cattle Breeding Centre (BC) and common cattle (CC, owned by farmers) from both sexes and various ages (retrieved around year 2011–2013). The records contained information on observed body weight (BW), chest girth (CG), body length (BL) and wither height (WH). We divided age cattle into 3 classes: AG1 (< 1 yr old), AG2 (1–2 yrs) and AG3 (> 2 yrs). A Linear model incorporating the systematic effect of age and groups (CC or BC) was built to analyse the data (for each sex separately). In AG1, CC were heavier (99.8 ± 37.4 Kg) compared to BC (92.3 ± 25.5 Kg) under $p < 0.05$. The averages BW for AG1 were 146.1 ± 28.7 and 124.1 ± 27.4 Kg; AG2 were 169.4 ± 27.0 and 108.7 ± 26.4 Kg for CC and BC, respectively. Results for female cattle, CC were also heavier compared to BC (103.4 ± 49.3 and 82.1 ± 25.5 ; 187.0 ± 48.3 and 116.5 ± 40.2 ; 182.5 ± 3.5 and 100.8 ± 26.7) for AG1, AG2 and AG3 respectively. Aceh cattle body build is relatively small with remarkable variations among individuals. The environment and management factors were suspected to play role over this fact. Moreover, the ‘meugang’ requires large amount of male cattle to be slaughtered 3 times/yr. Tradition wise, people would only consume Aceh cattle. Without a proper breeding strategy, the event will eventually exhaust the superior male genetic resources. The Breeding Center was offered as a solution to bring a better genetic resources management. However, seems, the role of it has yet to reach the optimum; thus, breeding system’s evaluation and improvement are needed.

Keywords: Aceh cattle, Breeding Centre, breeding system, traditional event