**ABSTRACT**

The study was conducted in a renowned poultry farm CP (Charoen Pokphand) Bangladesh, Rangpur-2, Bormochari, Dinajpur from 24th November to 20th December, 2013. The objective of the study was to compare the care, management & production performance like the body weight gain, egg production percentage and hatchability percentage of egg of Cobb 500 broiler parent stock in the existing management system of CP Bangladesh Rangpur-2, with the recommended care, management, production performance according to the “Cobb 500 Breeder Management Guide”. The result of the study reveals that the average observed weekly body weight gain and recommended body weight gain of Cobb 500 female at 21weeks, 28 weeks, 32 weeks, of age were 3110gm vs 3105gm, 3390gm vs 3385gm, 3615gm vs 3615gm respectively. The average observed weekly body weight gain and recommended body weight gain of Cobb 500 male at 21weeks, 28 weeks, 32 weeks of age were gm 3320vs 3250gm , 3990gm vs 3960gm , 4250gm vs 4180gm respectively. The average observed weekly egg production percentage and recommended egg production percentage of Cobb 500 at 24weeks, 28 weeks; 32 weeks of age were 3%vs 5%, 75%vs78%, 83%vs83% respectively. The average observed weekly hatching egg production percentage of egg and recommended hatching egg production percentage of egg of Cobb 500 at 24weeks, 28 weeks, 32 weeks of age were 70%vs 72%, 85%vs84%, 88.9%vs88% respectively. From the analysis of data it can be said that there are very insignificant amount of differences between the observed data and recommended data .Therefore it may be inferred that Cobb 500 performed well under the existing management system.

**Key words:** Cobb 500, Body weight gain, Egg Production & Management System.