# PERANCANGAN ALAT BANTU PETERNAKAN AYAM PETELUR MENGGUNAKAN METODE *ERGONOMIC FUNCTION DEPLOYMENT* (EFD) ( STUDI KASUS PETERNAKAN BAROKAH DI DESA KALI BEJI, KEBUMEN)

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## ABSTRAK

Observasi pada peternakan ayam petelur barokah di Desa Kali Beji Kebumen, diketahui bahwa pekerjaan masih dilakukan secara manual seperti pengambilan telur dan juga pemberian pakan. Pekerja harus mengambil 900 telur saat puncak produksi untuk 1 rumah kadang secara manual dan memberi makan 1080 ayam secara manual, pada analisis *Rapid Entire Body Asessment* (REBA) didaptkan poin 8-10 jua 1 point ber-nilai 7 dan juga keluhan pekerja berlevel tinggi dan sedang berdasarkan *Nordic Body Map* (NBM). analisis terhadap kepuasan dan kepentingan diapatkan bahwa prioritas pertama alat tidak perlu menunduk dan menjangkau yang jauh yang dapat menyebabkan keluhan. Alat dirancang berdasarkan antropometri dengan Persentil 50 pada gagang alat pakan,tinggi meja, lebar busa, panjang busa, gagang pengambil telur,jarak antar tiang pemberi pakan secara berurutan sebesar 4,81cm,92,25cm, 37,25cm, 38cm, 4,81cm, 80,12cm dan untuk jarak antar gagang menggunakan Persentil 95 sebesar 46,91cm membantu pekerjaan mengambil telur dan pemberian pakan. nilai *Rapid Entire Body Asessment* (REBA) alat baru berkurang menjadi 4 untuk kegiatan mengambil telur atas dan bawah juga mendorong alat, kemudian skor 3 untuk merapikan telur karena adanya perbaikan posisi saat bekerja, lalu gerakan yang dilakukan pekerja juga berkurang, untuk mengambil telur melakukan 120-240 gerakan perhari dan langsung menyusunnya sedangkan untuk pemberian pakan dilakukan dengan cara mendorong alat.

Kata Kunci ; Ergonomi, *Rapid Entire Body Assesment* (REBA),*Ergonomic Function Deployment* (EFD), Antropometri, *Nordic Body Map* (NBM)

# *DESIGN OF LAYER FARMING TOOLS USING ERGONOMIC FUNCTION DEPLOYMENT (EFD) METHOD ( CASE STUDY OF BAROKAH FARM IN KALI BEJI VILLAGE, KEBUMEN)*

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## ABSTRACT

*Observations on barokah laying hens in Kali Beji Village, Kebumen, it is known that work is still done manually, such as taking eggs and also feeding. Workers have to take 900 eggs at peak production for 1 house sometimes manually and feed 1080 chickens manually, in the Rapid Entire Body Assessment (REBA) analysis, 8-10 points are obtained, 1 point is worth 7 and also complaints from high-level workers and medium based on Nordic Body Map (NBM). analysis of satisfaction and importance found that the first priority of the tool does not need to be looking down and reaching far which can cause complaints. The tool is designed based on anthropometry with 50th percentile on the handle of the feed tool, Tabel height, foam width, foam length, egg take handle, distance between feeder poles sequentially 4,81cm,92,25cm, 37,25cm, 38cm, 4,81cm , 80.12cm and for the distance between the handles using the 95th percentile of 46.91cm to help the work of taking eggs and feeding. the Rapid Entire Body Assessment (REBA) value of the new tool is reduced to 4 for activities to pick up eggs up and down also push tools, then score 3 to tidy up eggs due to an improvement in position while working, then the movement made by workers was also reduced, to take eggs they did 120-240 movements per day and immediately arranged them, while for feeding it was done by pushing tool.*

Key Word: Ergonomic, *Rapid Entire Body Assesment* (REBA),*Ergonomic Function Deployment* (EFD), Antropometry, *Nordic Body Map* (NBM)