

## PENILAIAN EKONOMI LINGKUNGAN PENANGANAN PENYAKIT MULUT DAN KUKU SAPI POTONG DI KABUPATEN SLEMAN

### INTISARI

Lovin Dika Antari  
21/489190/PPT/01190

Peternakan di Indonesia mengalami masalah serius dengan adanya Penyakit Mulut dan Kuku (PMK), salah satu kabupaten yang terdampak adalah kabupaten Sleman. Sapi yang terinfeksi oleh PMK bisa mengalami penurunan produktivitas hingga kematian. Untuk itu perlu dilakukan tindakan penanganan yang tepat dan cepat. Setiap peternak pasti memiliki cara yang berbeda dalam melakukan penanganan wabah PMK tergantung pada kesadaran masing-masing peternak. Penelitian ini bertujuan untuk mengidentifikasi macam kegiatan penanganan PMK dan pemilihan tingkat keputusan dalam penanganan PMK, menganalisa faktor-faktor yang berpengaruh pada biaya sosial internal, dan menghitung kerugian ekonomi dampak terjadinya PMK. Lokasi penelitian di Kabupaten Sleman, dengan tiga kecamatan paling terdampak Kecamatan Ngaglik, Cangkringan, dan Sleman. Responden sebanyak 100 peternak terdampak PMK dengan *purposive sampling*. Analisis data secara deskriptif kuantitatif. Pengambilan data primer melalui wawancara langsung pada peternak menggunakan alat kuesioner. Macam biaya lingkungan atau sosial internal dianalisis menggunakan metode *Contingent Valuation Method (CVM)* dan analisis faktor-faktor yang mempengaruhi besarnya biaya sosial internal dengan analisis regresi linier berganda. Kerugian ekonomi dampak terjadinya PMK di tingkat peternak dianalisis menggunakan *Enterprise budgeting* dan perhitungan wilayah dengan pendekatan perhitungan *Total Economic Value*. Pemilihan keputusan strategi dalam pencegahan dan penanganan PMK digunakan analisis regresi Ordinal Logistik. Hasil penelitian tersebut didapatkan kegiatan penanganan PMK meliputi tambahan tenaga kerja untuk sanitasi (46%), desinvektan (39%), vaksin (93%), nutrisi tambahan (10%) dan isolasi (1%). banyak peternak memilih tindakan vaksin karena kepercayaan peternak terhadap efektivitas vaksin sudah tinggi, selain itu juga peran pemerintah yang mengedukasi peternak tentang pentingnya vaksin. Nilai *Willingness to Pay* peternak adalah Rp193.078/peternak/tahun. Analisis regresi ordinal logistik menunjukkan pemilihan keputusan dalam penanganan PMK oleh peternak sapi potong di kabupaten Sleman dipengaruhi oleh jumlah kepemilikan sapi dan pendapatan peternak. Kesadaran peternak untuk melakukan penanganan wabah PMK baik, yaitu dengan menerapkan 2 strategi penanganan dengan peluang 0,999. Berdasarkan analisis regresi linear berganda, jumlah kepemilikan ternak berpengaruh sangat nyata, pendidikan dan income berpengaruh nyata, pengalaman peternak berpengaruh signifikan kurang nyata terhadap biaya sosial internal penanganan PMK. Berdasarkan perhitungan enterprise budget dan *Total Economic Value* kerugian ekonomi akibat adanya wabah PMK pada saat outbreak kabupaten Sleman adalah Rp8.763.758.006.

Kata kunci : ekonomi lingkungan, kerugian ekonomi , penyakit mulut dan kuku.

## ECONOMIC ASSESSMENT OF THE HANDLING ENVIRONMENT MOUTH AND HOUSE DISEASES OF BEEF CATTLE IN SLEMAN DISTRICT

### ABSTRACT

Lovin Dika Antari  
21/489190/PPT/01190

Livestock in Indonesia is experiencing serious problems with Foot and Mouth Disease (FMD), one of the districts affected is Sleman district. Cows infected with FMD can experience reduced productivity and even death. For this reason, it is necessary to take appropriate and fast treatment measures. Each farmer definitely has a different way of handling FMD outbreaks depending on the awareness of each farmer. This study aims to identify the types of FMD handling activities and the selection of decision levels in FMD handling, analyze factors that affect internal social costs, and calculate economic losses due to FMD. The research location is in Sleman Regency, with the three most affected sub-districts being Ngaglik, Cangkringan and Sleman sub-districts. Respondents were 100 farmers with purposive sampling. Data analysis is quantitative descriptive. Primary data was collected through direct interviews with farmers using a questionnaire tool. Types of environmental or internal social costs are analyzed using the Contingent Valuation Method (CVM) and analysis of factors that influence the amount of internal social costs using multiple linear regression analysis. The economic losses from the impact of FMD at the farmer level were analyzed using Enterprise budgeting and area calculations using the Total Economic Value calculation approach. Selection of strategy decisions in preventing and handling FMD uses Ordinal Logistic regression analysis. The results of this research showed that FMD handling activities included additional labor for sanitation (46%), disinfectant (39%), vaccines (93%), additional nutrition (10%) and isolation (1%). Many farmers choose vaccination because farmers' confidence in the effectiveness of vaccines is high, apart from that, the government plays a role in educating farmers about the importance of vaccines. The farmer's Willingness to Pay value is IDR 193,078/breeder/year. Logistic ordinal regression analysis shows that decisions made in handling FMD by beef cattle farmers in Sleman district are influenced by the number of cattle owned and the farmer's income. Farmers' awareness of handling FMD outbreaks is good, by implementing 2 handling strategies with a probability of 0.999. Based on multiple linear regression analysis, the number of livestock ownership has a very significant effect, education and income have a significant effect, the farmer's experience has a less significant and less significant effect on the internal social costs of handling FMD. Based on enterprise budget calculations and Total Economic Value, the economic loss due to the FMD outbreak during the Sleman district outbreak was IDR8.763.758.006.

**Keywords:** economic loss, environmental economics, foot and mouth disease.