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MANAGEMENT STRATEGY OF ANIMAL HEALTH AND PRODUCTION CONTROL ON ANTICIPATION GLOBAL WARMING FOR ACHIEVEMENT OF MILLENNIUM DEVELOPMENT GOALS

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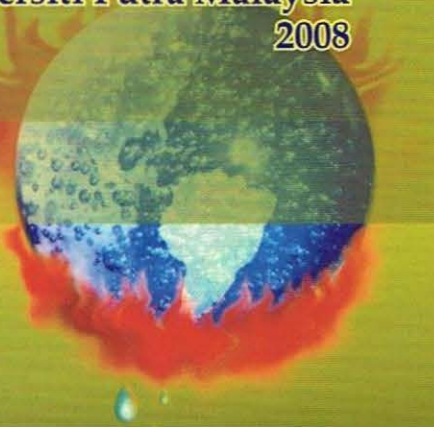

THE RELATIONSHIP BETWEEN BREEDER'S BEHAVIOR IN LIVESTOCK DROPPINGS MANAGEMENT AGAINST ENVIRONMENT QUALITY IN CENTRAL LOMBOK REGENCY

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INTRODUCTION

Development of intact human being and all Indonesia society are the aim of National development. Various programs carried out during the time, intrinsically to effort and rising up the quality live of Indonesia society. The aim of healthy developments was to rise up the abilities of optimal healthy life resident. Problem of health society, especially in some developing countries are basically concerning two main aspects. First is the physical aspect, for example the available of medium environment health and medication of diseases. Secondly are nonphysical aspect, its concerning behavior of health which influence to status of health society and individual (Sarwono, 1993).

Cows shed in each area in Indonesia generally located to adjoin even becoming one with owner of livestock house, but in Lombok island, many collective group of cage have formed by society initiatives it self. Although there are the owner of livestock that still not interested to become member of Collective Stable Group. Bell *et al.*, (1973) telling, 16 oxen yield 880 lbs feces each day. If one lbs = 0,454 kg, its mean one ox yield 25 kg wet heavy feces each day.

Hereinafter for the dirt of livestock, although the smell is not good, but in fact livestock dirt has many benefits. After husbed a few moments, the livestock dirt can be used as manure. And if did not manage dirt livestock better, it can degrade the quality of environment health. Developing ranch that close to resident location will be protested by the people around, cause of contamination that generated by livestock dirt. That's why the ranch location usually far from settlement of resident (Setiawan, 1996).

Ranch location will be better if it far from settlement. For a big ranch with a lot of fund, this matter will not be problem caused the breeder could provide all facility at location that they need. However, for small breeder this matter will become serious problem. There are big number of households breeder in area of NTB, consist of 187.733 oxen breeders, 94.550 of buffalo beeders, 29.984 of goat breeders as well as other livestock like chicken "Buras", chicken and duck (Anonim, 1999/2000).

Mentioned to number of livestock farmer above, group of livestock farmer as place of breeder to cooperate and also for assisting by officers of ranch have been unionized. At middle of Lombok Island, there are 228 oxen livestock farmer group which still smaller compare to 187.733 existing breeders. Lacks attention to cage system and environment sanitation according to health standard were the other problem of breeder.

MATERIALS AND METHODS

Research methods are observation and analyze which data collected according to the execution time by Cross Sectional with consideration that variable "cause and effect" were perceived at selected period. The number of sample is equal to 109 breeders as member of Collective Stable Group. Proportional multi stage random sampling technique was used for the research. Primary and secondary data were used for the research. Quantitative data processed and analyzed with statistical test: Chi-Square, Multiple Regression, Spearman Correlation, and Pearson's R.

RESULTS AND DISCUSSION

The research results are to exploited dirt livestock of breeder that could reduce the risk of environment contamination as the dirt livestock management. And the concerned of dirt livestock behavior management are behavior done by respondent concerning the

way of how they manage correct and good dirt livestock. Most of breeders behavior which have come as member to Collective Group Cage, they clean and throw away dirt livestock directly to aqueduct around the cage without collecting it before.

Group of collective stable is a group of oxen, goat, chicken "Buras", duck, and other livestock breeder that life at one particular orchard region. Actually, the groups are potential for tuition and counseling such as ranch activity, agriculture and they own healthiness. They also have organization chart, duty of each section, plan of team works, and also "awiq-awiq" group which must peremtory by entire member. Quality of such environment breeder in this research is to observe how far the hyglene of cage livestock and also the house of breeder itself. How about position, size, and situation of stable have been already fulfilled as healthy condition stable. And also for breeder house, are there any wells which minimal 10 meters away from home are there any dismissal for feces, is there any ventilation, lighting, and other things according to healthy house condition

Result of the research shown that breeder which have come as member to collective stable group, the position of collective cage generally far from settlement of resident around 300 – 700 meters, so the environment of breeder house are save from impure by dirt livestock and reek aroma. Stable cleaning is usually done every day, and cleaned every two or three days for food boxes. Each collective stable have aqueduck, so dirt livestock was cleaned every day by sweeping it into aqueduck around the stable and finally poured into rice field. According to observation in field, the condition of environment breeder house of Collective Stable Group has been fulfilled healthy home condition, such as: position of well > 10 meters, a vailable of feces dismissal, dismissal of water waste, dismissal of garbage, kitchen facility and family room.

Situation and condition environment which are not member of breeder Collective Stable Group are not fulfill the condition such as background and construction told by Djarijah (1996) she said the minimum distance of stable to house is 10 meters. According to result analyze by using test of Person's R, hence relation between behavior of dirt livestock management with environment quality is $p = 0.000$ because $p < 0.05$.

CONCLUSIONS

Conclusion of the research were : from 109 breeder, 40.3 % graduated from SD, and only 3.7 % graduated from SMA. Environment of houses breeder 40.4 % are in good condition. Member of collective cage group livestock have fulfilled of healthy stable condition. Well water consist E Coli bacterium above boundary condition. Management of dirt livestock only thrown it into aqueduck and finally poured into rice field. Stable position > 10 meters from settlement. Result analyze behavioral, there is relation between management of dirt livestock with environmental quality ($p = 0.000$), because $p < 0.05$.

REFERENCES

Adhyatma, 1985. Kesehatan Perkotaan. Majalah Kesehatan Masyarakat Indonesia No. 8. Th. XV. Jakarta.

Anonim, 1999/2000. Program Penyuluhan Peternakan Tahun 2000. Pemerintah Propinsi NTB. Dinas Peternakan Mataram.

Azwar Azrul, 1990. Pengantar Ilmu Kesehatan Lingkungan. PT. Mutiara Sumber Widya. Jakarta.

Bell., 1973. Methane; Fuel of The Future. Prism Press Stabel Court, Chalmington, Dorset DT2 OHB.Mills

Chamala, S.; Mortiss, P>D., 1991. Motivating People dari buku Working Together for Land Care: Group Management Skill and Strategies.

Elder, JP., 1994. Motivating Heaslth Behaviour. Delmar Publisher. Inc, New York.

---------- , 1998. Pedoman Perilaku Hygienis. Dirjen PPm dan PLP.

---------- , 1998. Profil Kesehatan Indonesia Tahun 1998. Jakarta.

Djarijah, Abbas Siregar, 1996. Teknologi Tepat Guna. Usaha Ternak Sapi. Penerbit : Kanisius Yogyakarta.

Kusnoputranto, Haryoto, 1986. Kesehatan Lingkungan. Jakarta. Departemen Pendidikan dan Kebudayaan. FKM. UI.

Graeff, A. Judith; Elder, P. John; Booth, Elizabeth Mills, 1996. Komunikasi Untuk Kesehatan dan Perubahan Perilaku. Penerbit : Gajah Mada University Press.

Sahidu, Arifuddin, 1998. Partisipasi Masyarakat Tani Pengguna Lahan Sawah Dalam Pembangunan Pertanian Di Daerah Lombok, NTB. Disertasi, Institut Pertanian Bogor.

Sahidu, Sirajuddin, 1993. Kotoran Ternak Sebagai Sumber Energi. Penerbit : Dewaruci Press Jakarta.

Sarwono Solita, 1993. Sosiologi Kesehatan. Beberapa Konsep Beserta Aplikasinya. Gajah Mada University Press.

Setiawan, Ade Iwan, 1996. Memanfaatkan Kotoran Ternak. Penerbit : Penebar Swadaya Bogor.

Suryabrata, Sumadi, 1983. Metodologi Pewnelitian. Penerbit : CV. Rajawali Jakarta.

Zainuddin, Muhammad, 1999. Metodologi Penelitian. Surabaya, Airlangga Universitas Press.