"Environmental Protection toward Green Development"





AUN/SEED-Net





ASSESSING THE ENVIRONMENTAL PROTECTION STATUS OF PIG FARMING ACTIVITIES IN BAU BANG DISTRICT, BINH DUONG PROVINCE, VIETNAM

Vo Thanh Hang*1, Nguyen Huu Vinh1

(1) Faculty of Environment and Natural Resources, Ho Chi Minh City University of Technology (HCMUT)

Corresponding author: hang vothanh2003@yahoo.com/ hang vothanh2003@hcmut.edu.vn

Key words: livestock, pig farming, wastewater, environment quality, environmental management.

Introduction

Binh Duong is a dynamically developing province with an average GDP growth rate of 13% per year. The economic structure has changed positively, the industry and services have grown quickly and accounted for a high proportion. In 2015, the rate of industry - construction 62.9%, services 33.7%, agriculture and forestry 3.4%. However, in the context of rapid industrialization and modernization, there has been a lot of great pressure on the environment, in which the inspection and supervision of wastewater discharged into the natural environment has become increasingly urgent. Besides the wastewater from industrial activities, the livestock enterprises in the province also discharge a large of wastewater that needs to be controlled. And Bau Bang is a district located in the northern part of Binh Duong Province, along with Phu Giao and Bac Tan Uyen. Bau Bang is one of the three large scale livestock districts of Binh Duong Province and is included in the provincial livestock planning by 2020. With the livestock sector, as one of the highest polluting sectors, it requires the people as well as local authorities to take appropriate measures and directions to combine economic development with conservation. about environment.

The study focused on the current state of management of livestock environment of the local government, the management and remedy of environmental problems of livestock households in Bau Bang district on air, wastes and wastewater in recently. It also will help to recognize the problems in the management as well as the environmental protection of livestock producers in this area.

Material and Methods

This study has investigated and interviewed the environmental issues of pig farms in Bau Bang district with different farming models (tradition pig farm and pig farm with ecological packing)

Results and Conclusions

- 1. *Traditional breeding model*: open with uncover system, exposed to outside air
- 2. *Cold breeding model*: enclosures, stable temperature by pig age. The cage is sealed, completely separated from the outside, one with large exhaust fans and the opposite side with cooling water system
- 3. *Ecological packing model*: area of about 40 m² with 20 breeding pigs. Floor has cover by rice husk and sawdust mixed with bacterial enzymes

"Environmental Protection toward Green Development"





AUN/SEED-Net











Fig. 1. Traditional breeding model

Fig. 2. Cold breeding model

Fig. 3. Ecological packing model

Solution on environmental management for reducing the pollution of pig farms:

- 1. Composting method
- 2. Using biological products
- 3. Biogas method

References

ASEA - American Society of Agricultural Engineers (2003), ASEA Standards.

Ninh Thai Nguyen and Thu Ngoc Do (2014), Aplying cleaner production solution for pig breeding in Binh Duong. B.Sc. thesis, Dept Envi. Eng., HCMC Univ. of Technology, Vietnam

Dep. of Agriculture and Rural Development of Binh Duong province (2015). Report on the implementation of the agricultural restructuring program in the direction of rural and urban development, high-tech agriculture in combination with stage processing in period 2011 – 2015.