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## **How can organic pig production with local breeds in the Philippines succeed in keeping morbidity and mortality low while avoiding anti-microbial use?**

Master Thesis  
Submitted by **Sangeun Bae**

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## SUMMARY

This thesis was a follow up study to further assess the potential of utilizing native pig breeds in the context of smallholder organic livestock production in the Philippines. More specifically, it aimed to assess the potential of local pig breeds in their contribution to having a lowered disease incidence which is an important aspect of organic livestock production. Semi-structured interviews with smallholder pig farmers keeping native and non-native pigs were conducted in Tiaong and Infanta; two municipalities in which an earlier study had identified a potential for organic livestock production. Native and non-native pig keepers' practices with regards to the health management of their pigs were compared. And in the context of their management practices, the occurrences of diseases and their outcomes were documented. This allowed in identifying the key issues that will enable smallholder farmers keeping native breeds to keep morbidity and mortality low with minimum use of antibiotics.

The findings of the present study showed that even under low veterinary management intensity, native pig breeds had lower or similar occurrences of diseases compared to the non-native breeds which were managed with high veterinary inputs. However, diseases when they occurred had a higher impact on native pig farms in terms of piglet mortality. Both native and non-native pig keepers resorted to antimicrobial treatments in the event of a disease, but the odds of their use was much higher with the non-native pig keepers who generally had more years of experience in pig keeping, were more averse to economic losses and had greater access to veterinary services. Native pig keepers were knowledgeable in a repository of ethno-veterinary plants for treating disease conditions in pigs. However, inconsistencies in the dosage and method of administration put their effectiveness in question.

Given the characteristic low input production systems of native pig keepers, measures to prevent the occurrence of disease in the first place seem to be a more sustainable measure. Training native pig keepers on husbandry practices, especially with regards to the care of piglets, is recommended. Also, farmers' knowledge of ethno-veterinary plants has great potential to be utilized as a low cost and ecologically sound measure to prevent or treat diseases in their pigs. However, this would have to be complemented with farmers' understanding of the causes of pig diseases and their ability to recognize symptoms of common pig diseases so that the potential of these ethno-veterinary plants can better be utilized. Extension services in this regard are therefore recommended.