respectively egg yields. Thus, the owner will subsequently earn more from the birds, and this will contribute towards poverty alleviation for these villagers.

A-53 EASE OF TRANSMITING P. MULTOCIDA BETWEEN INDIGENOUS CHICKENS AND DUCKS THROUGH CONTACT TRANSMISSION

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A total of ninety-six indigenous birds were intracheally infected with Pasteurella multocida, paired and sacrificed at specified times. Seven organs from each of the four pairs were swabbed for culture and tissues taken for FISH test to detect the presence of the bacterium in these birds. For culture method, oropharyngeal and cloacal swabs were collected. Cultured and bacteria characterized by biochemical tests. While for FISH test, tissues were processed for histology after fixation in formalin for 24 hours and later preserved in 70% alcohol before in situ hybridization test. All organs had P. multocida signals on FISH test, but large intestine/cloaca and preening gland were negative for the bacterium on culture. The infectivity per bird ranged from 47.75% on FISH test and 7-50% on culture from all the organs. Four (lungs, trachea/oropharyngeal, liver and spleen) of the organs were positive for FISH signals but only one (trachea/oropharyngeal) on culture from 1 hr to 14 days post infection. Both tests were positive for P. multocida immediately after inoculation. FISH signals were found in a decreasing manner in the lung, trachea/oropharyngeal, liver, spleen, caecal tonsils, large intestine/cloaca, and preening gland. On culture, the bacteria were found in a decreasing manner in the trachea/oropharyngeal, lung, spleen, liver and caecal tonsils. Most cultured isolated were made between 1-24 hours while several intermittent ones thereafter, and none at all after the 10th day post infection. These results show that FISH test is more sensitive than the culture method and can be used to detect Pasteurella multocida in many organs.

A-54 COMPARISON BETWEEN FLUORESCENT IN-SITU HYBRIDIZATION (FISH) AND CULTURE METHOD IN THE DETECTION OF PASTEURELLA MULTOCIDA IN ORGANS OF INDIGENOUS BIRDS

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Livestock production is a major source of livelihood among pastoralists in SSA. However, the potential contribution of animals at household level is being limited by several constraining factors.
UNIVERSITY OF NAIROBI

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