Vaccination to Live, can it be an option to prepare for FMD potential risk in Japan?

Hosono, H.1, Yamaguchi, M.2 and Shirai, J.2-3, 1The University of Tokyo, Japan, 2Kyoto University, Japan, 3Tokyo University of Agriculture and Technology, Japan; hiromix@isas.a.u-tokyo.ac.jp

Foot and Mouth disease outbreak in Miyazaki, Japan in 2010 caused about 290 thousand animal culling and the estimated economic loss amounts to 234 billion yen according to the local government. The outbreak has converged in July 2010 and recovered FMD free status in Feb. 2011 due to the application of vaccination to kill policy as well as collaborative efforts of stakeholders. This prompt recovery has been praised globally however there still remain arguments from the economic or animal welfare point of view. Most economic analysis of FMD that compare the cost effectiveness of vaccination and stamping out emphasize the importance of international market access. However, it is not the case when the feature of Japanese livestock market is taken into account; expensiveness of animal, precious genetic resource, mostly consumed domestically and limited exports. Under this condition, consumer opinion plays key role to identify economically viable policy. Reflecting this, we conducted a web-based consumer survey on attitude toward FMD control measure taken during the outbreak and willingness to accept for meat if vaccination to live strategy is to be applied. A total of 1920 valid response from female aged 20-69 were collected. As a result, 46.4% of respondents revealed the discomfort with destroying animal only for economic reason, 24.8% showed intention to purchase FMD vaccinated meat if the animal were not infected and 15.3% willing to buy FMD vaccinated meat to support Miyazaki. Willingness to pay (WTP) for FMD vaccinated beef and pork compared to non-vaccinated meat were 56.8% and 65.5% respectively. However consumers who want to support the affected area revealed 150% WTP both for beef and pork if the animals were tested to be uninfected. Though the technical issue remained to assure the vaccinated animal to be uninfected, the results indicate the vaccination to live strategy could be an option to prepare for the future outbreak.