

## ABSTRACT

Contagious Bovine Pleuropneumonia (CBPP) is an economically important disease in most of sub-Saharan Africa. A conjoint experiment and ordered probit regression models were used to measure the preferences of farmers for CBPP vaccine and vaccination attributes. This was with regard to inclusion or not of an indicator in the vaccine, vaccine safety, vaccine stability as well as frequency of vaccination, vaccine administration and the nature of vaccination. The experiment was carried out in 208 households in Narok District of Kenya between October and December 2006 using structured questionnaires, 16 attribute profiles and a five point Likert scale. The factors affecting attribute valuation were demonstrated by a two-way location interaction model. The study also demonstrated the relative importance (RI) of attributes, the important trade offs between attributes and the compensation value of attributes. The coefficient estimates showed that farmers prefer a vaccine that has an indicator, is 100% safe and is administered by the government ( $p < 0.0001$ ). Preference for annual vaccination, stability of vaccine and elective vaccination was not unanimous ( $p > 0.05$ ). Price was the least important (RI=0.5%) attribute while inclusion of an indicator in the vaccine was the most important (RI=43.6%). Of the 22 household factors considered, 15 affected attribute valuation. The trade offs between inclusion of an indicator and safety and other vaccine attributes were high (14.6-18.5) while those between vaccination attributes were moderate (4.3-4.5). The compensation values for indicator, safety, stability and nature of vaccination were positive while those for frequency of vaccination and administration were negative. The study concluded that the farmers in Narok District had specific preferences for vaccine and vaccination attributes. These preferences were conditioned by various household characteristics and disease risk factors. On average the farmers would need to be compensated / persuaded to accept biannual and private vaccination against CBPP. **Keywords: Conjoint experiment, farmer preferences, Contagious Bovine Pleuropneumonia (CBPP), Vaccines, Vaccination, Narok District, Kenya.**