FMD as a socioeconomic concern for smallholder farmers has previously been under-estimated, with assumptions that as mortalities are low and affected animals generally recover, impacts on morbidity can be ignored and smallholders will not engage with TAD control interventions. We conducted financial impact surveys of FMD and HS outbreaks in villages in Cambodia and identified significant financial direct and indirect costs from both diseases on affected households. The average post-FMD loss varied from USD 216.32, a 54% reduction from the pre-FMD value because of weight loss and treatment costs, to USD 370.54, a 92% reduction from pre-FMD values if the animal was treated, died and a rental draft replacement was required. Partial budget analysis identified a strongly positive incentive for cattle to be vaccinated biannually for FMD, providing USD 31.48 per animal for each animal owned (Young et al, 2012). However low vaccination rates suggest that farmers are mostly unaware of the need or averse to the practice of vaccinating their cattle for FMD. Further, an average annual loss and replacement of 17% of our ACIAR project (AH2005/086) animals in Cambodia that with increasing rates of loss towards the end of the project as the demand for beef continued to grow in the region, ensuring sufficient numbers of vaccinates are present to provide continuous village-level protection against FMD and HS by vaccination alone is a major challenge.

With largely ineffective animal movement controls and variable surveillance and emergency response capacities in the region, the current SEACFMD regional vaccination strategy could consider inclusion of participatory learning programs that can deliver improved biosecurity in FMD hotspots and critical nodes if sustainable control and possibly eradication of FMD is to be achieved by 2020 (Nampanya et al, 2012). Our research demonstrates that a systems approach focused on nutrition, health and marketing and including biosecurity messages in addition to vaccination for FMD and HS, is a preferred development strategy for alleviating rural poverty and addressing food security in the Mekong region.

References
