

## A pathway to the control and prevention of Food-and-Mouth Disease (FMD)

Foot-and-mouth disease (FMD) is a highly contagious disease affecting all cloven footed animals. Cattle are very susceptible to FMD. Afghanistan is one of the most affected countries with numerous FMD outbreaks that are annually causing great economic losses.

Vaccination is one of the most important measures to prevent and control FMD disease. Therefore, the FAO/DCA collaborative FMD project aims to protect large ruminants by means of a vaccination program. The program especially focuses on cattle of farmers supplying milk to the dairy cooperatives/unions. The vaccination program is organized and scheduled in early spring and an



autumn vaccination campaign. During the spring vaccination campaign a total of **51,540** doses of FMD vaccine were administered and properly documented. Animals younger than one year received a booster dose to increase immunity. All vaccinated animals will receive a (first or second) booster during the autumn vaccination campaign. For implementation of the vaccination campaign 48 dedicated VFUs (Veterinary Field Units) are contracted.

To measure the vaccine efficacy (the presence of FMD antibodies in the blood), 360 serum samples were collected before and after the spring vaccination campaign from each of three age categories (6-12 months, 12-24 months and > 24 months cattle). The CVDRL (Central Veterinary Diagnostic and Research Laboratory) reported the presence of specific FMD antibodies in the serum samples. Moreover, interviews with the target farmers revealed that they have not experienced any outbreak of FMD disease in their animals after vaccination.



In addition to the vaccination campaign, extension services are an integral part of the project. To that end, the dairy cooperative members are organized in extension groups and linkages are strengthened between farmers and VFUs.

### **BENEFICIARY'S STORY**

H.M.J. is a 55-year-old farmer and leader of the dairy cooperative in Kabul province, Dehsabz district, Qala-e-Afzal village. Smiling, he expresses his happiness and satisfaction with the FMD vaccination program and adds that his animals and the animals of other cooperative members were not affected by FMD this summer. He says that in previous years their animals suffered from FMD disease, causing mortality in young animals and a significant decline in milk production in adult cattle. However, those animals in his village that were vaccinated, were not affected by the recent FMD outbreaks.

### **NON-BENEFICIARY'S STORY**

H.Z. is a 48-year-old farmer who lives in the same village of Kabul province. Because he wasn't a member of the dairy cooperative, his animals were not covered by the FAO/DCA FMD vaccination program. He expresses his sadness because his three-months old calf died due to the FMD disease and the milk production of his dairy cows declined from 25 to 15 liter/day. Although he applied some medicines on his affected animals, he could not get significant improvement. Therefore, he requested to become a member of the dairy cooperative. Now he is eagerly awaiting to be included in the vaccination campaign and the extension program.