



## Emergency vaccination against transboundary animal diseases in Lebanon

### Animal disease control to support resilient livelihoods in protracted crisis

→ **Context** The large influx of Syrian refugees into Lebanon - an estimated 1.5 million people - poses a major challenge for the country. Many refugees arrive with a substantial number of unvaccinated livestock, increasing the risk of transboundary animal diseases (TADs) in their host country. The impact on agriculture is particularly worrying, as livestock is the main source of income and livelihoods for a large number of people in rural areas, especially for poor and vulnerable communities. Livestock keeping is the mainstay of Lebanon's rural economy and has a significant impact on rural well-being and poverty alleviation, particularly in areas bordering Syria. This subsector generates significant household income through sales of live animals and/or dairy products. Many people, mainly youth and women, are involved in animal care and milk processing. In 2015, the Food and Agriculture Organization of the United Nations (FAO) carried out a vaccination campaign in Lebanon to control the spread of TADs.

→ **Challenge** With the intensification of the Syrian crisis, the regular delivery of animal health services in Syria has been significantly disrupted, leaving many animals without proper health care and vaccination. The crossing of borders by refugees with unvaccinated sheep, goats and cattle increases the number of dying, malnourished animals and of animals being sold at reduced market prices. Risks of outbreaks became a constant threat in Lebanon due to a limited disease surveillance and reporting, inadequate animal quarantine facilities and animal vaccination programmes. The Ministry of Agriculture reported, indeed, the first outbreak of Lumpy skin disease. In addition, Lebanese used to benefit from Syria's seasonal pastures and generous feed subsidies but, like the free vaccines, this source has disappeared. As such, TADs, high feed prices and pressure on seasonal pastures and rangelands are forcing Lebanese farmers out of business.

→ **Methodological approach** FAO supported the Veterinary Department to implement a two-year blanket vaccination campaign, through which about 96 percent of the national herd - mostly small ruminants - was vaccinated against three TADs: foot-and-mouth disease, *peste des petits ruminants* and lumpy skin disease. The vaccination was done by teams of community animal health workers specially trained for the exercise under the supervision of private and public veterinarians. In addition, FAO assisted the Ministry of Agriculture to strengthen disease surveillance and reporting, by training veterinary professionals of the Ministry of Agriculture and Community Animal Resources Development Workers (CARDWs). The training focused on good practices of emergency management, epidemiological surveillance for TADs, biosecurity, disease recognition and diagnosis.



#### Key facts

**Location** → An emergency vaccination campaign was carried out across all six governorates of Lebanon.

**Resource partner** → Funded by the Government of the United Kingdom and implemented in 2015 as part of the project "Emergency vaccination and targeted feeding of livestock grazing in areas along the Syria-Lebanon border".

**Key partners** → the Ministry of Agriculture of Lebanon and veterinarians.

**Target Group** → (i) Lebanese livestock keeping communities, including those hosting Syrian refugees; (ii) Lebanese returnees who have crossed into Lebanon from Syria; (iii) Syrian refugees who have crossed with their livestock into Lebanon; (iv) veterinary professionals and CARDWs; (v) Lebanese Ministry of Agriculture.

**Gender** → For the first time, veterinary team responsible for vaccinations included female veterinarians and female community animal workers. In addition, as the national herd is mainly composed of small ruminants, which are traditionally looked after by women, women-headed households were critical beneficiaries.



#### How does emergency vaccination contribute to increasing resilient livelihoods?

As livestock represents a vital asset for many vulnerable farmers, FAO's support on emergency vaccination aimed at reducing losses due to the spread of TADs. By protecting livestock from devastating disease, FAO is protecting the livelihoods of livestock keepers and improving the nutritional status of many, especially children, by ensuring a source of animal proteins. Keeping livestock healthy ensures their productivity and enables farmers to continue their income-generating activities associated with livestock keeping (selling of meat, dairy products, wool, leather and live animals).

→ **Impacts** FAO helped reduce the spread of TADs, which occurs due to significantly weakened capacity of animal health services in Syria. The support provided has been indeed critical to protect the only source of income for many households (Lebanese herders in host communities, returnees and Syrian refugees) relying only on livestock for their livelihoods. Thanks to the national vaccination campaign, no further outbreaks were reported and the livestock assets of almost all farmers were protected, thereby increasing the productivity and quality of milk and meat products. Capacities of the Ministry of Agriculture were also reinforced through the development of a national control strategy for major TADs, and through targeted trainings for veterinary services professionals in Lebanon.

*In total, 10 235 households benefited from this practice, improving their income and their families nutritional contidtion. Livestock keepers are now working in a disease free environment.*

→ **Sustainability** The practice enhanced the capacity of the Veterinary Department to prepare for and respond to current and future epidemic disease emergencies. A pool of CARDWs is now available in case a large vaccination exercise is required. The benefits of the trainings provided extend well beyond the duration of the intervention through reinforced veterinary capacity in disease surveillance. In addition, now that a monthly disease reporting system is in place, animal health will be better monitored and future outbreaks and the resulting losses can be managed in a timely manner.

*The risk of transboundary diseases is now minimized and livestock production contributes to resilience-building.*

→ **Replicability** The achievements can be scaled up by ensuring an appropriate follow-up of the implementation of the national control strategy. The capacities of animal health professionals can be easily maintained by offering regular refresher courses and extending the pool of trained CARDWs. With the acquired capacity of the national animal disease control, a national emergency vaccination campaign can now be organized as soon as an alert is triggered.

*Thanks to the development of capacities, a national emergency vaccination campaign can now be organized as quickly as needed.*

## Testimonials from beneficiaries

"I had six cows, three of them died... without the necessary vaccines all my cows would have died."

"In the past, we faced several problems, our cows used to die without us knowing the reasons... with the Ministry of Agriculture, FAO provided cows with all necessary vaccines and medical supplies, they checked the condition prevailing in the farm and took samples to inspect our livestock... We started noticing good results."



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## → More information

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"The Power of resilience" (video):  
<https://youtu.be/93l3inPrmpl>

## On resilience good practices:

- [KORE@fao.org](mailto:KORE@fao.org)
- [www.fao.org/in-action/kore/good-practices/en/](http://www.fao.org/in-action/kore/good-practices/en/)

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