



GF-TADs

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



Food and Agriculture
Organization of the
United Nations

Oie
WORLD ORGANISATION
FOR ANIMAL HEALTH

Standing Group of Experts on African swine fever in the Baltics and Eastern Europe Region under the GF-TADs

Expert mission on African swine fever in **Belarus** **REPORT¹**

- ❖ **Period:** 12 – 17 April 2015
- ❖ **SGE Experts:** Klaus Depner (team leader, FLI, Germany); Silvia Bellini (IZSLER, Italy); Konstantine Gruzdev (FGBI, ARRIAH, Russia)
- ❖ **Time schedule and places visited during the mission:**
 - 12 April: Arrival in Minsk
 - 13 April: Opening meeting at the Department of Veterinary and Food Surveillance, Ministry of Agriculture and Food, Minsk
 - 14 April: Visit of the Ivey District in the Grodna province
 - Visit of the district veterinary office, commercial farm, backyard farm, hunting ground
 - 15 April: Visit of the district veterinary office in Lida District, Grodna province
 - Visit of the back yard holding where the first outbreak of ASF occurred in 2013
 - 16 April: Final meeting at the Department of Veterinary and Food Surveillance, Ministry of Agriculture and Food, Minsk
 - 17 April: Departure

Details concerning the agenda, the ToRs and the persons who were met during the mission are given in the Annex.

❖ **Terms of reference**

1. The experts should perform on the spot visits (as detailed in the Annex) in order to gather data and be in a position to formulate recommendations on disease management.
2. The experts should work with the Veterinary Services in order to determine the following aspects:

¹ Disclaimer: The views and recommendations expressed in this document are those of the independent experts and may not in any circumstances be construed as the official position of their organisation, nor of the EC, OIE or FAO

- If African swine fever (ASF) is occurring in domestic pigs (both in commercial sector and the so called back yard sector) and extent of the areas of occurrence.
 - If ASF is occurring in wild boar and geographical distribution of ASF in wild boar.
 - Formulate hypothesis on the drivers of ASF occurrence for domestic pigs and back yards.
3. Propose measures intended for the control and eradication of ASF under local conditions, in line with the OIE International Standards.
 4. The experts should report to the Standing Group of Experts on African swine fever in the Baltics and Eastern Europe under the OIE/FAO GF-TADs and to the Veterinary Services of the country being visited. A written report should be produced for each mission.

Findings of the mission

ASF history

So far two outbreaks of ASF were notified in Belarus. The first outbreak was notified on the 22nd of June 2013 in a back yard holding with one pig in the Grodna province (west of Belarus). The second outbreak was notified few days later on 1st of July 2013 in a large commercial farm with 20.000 pigs in the Vizepsk province (east of the country). The two outbreaks were not epidemiologically linked. Regarding the first outbreak it is believed that the ASF virus has been introduced into the backyard by contaminated feed sold by an unknown trader. As regards the large commercial farm it was reported that it has most probably been infected by a hunter which has been hunting in the Russian Federation in an area where ASF was present in wild boar. No cases of ASF in wild boar have been reported from Belarus.

Pig production

At present about 3.25 million pigs are kept in Belarus in the following farm systems:

- Back yard holdings: 0,5 million pigs in about 80.000 back yard holdings with up to 10 pigs
- Private farms: 25.000 pigs in about 50 private farms with a size of about 500 pigs/farm
- Small state commercial farms: about 120 farms with 1000 – 5000 pigs
- Large state commercial farms: 107 farms with more than 5000 pigs. The largest farm in Belarus has 110.000 pigs. In the commercial farms (small and large) about 2.5 million pigs are kept in total.

For example in the Grodna province, which has been visited by the SGE team, 600.000 pigs are kept in 53 large commercial farms. The largest farm has about 80.000 pigs. About 47.000 pigs are kept for own consumption in about 20.000 back yard farms. In the Grodna province it is not allowed to keep more than 3 pigs in a backyard.

Belarus is planning to increase its domestic pig production in the near future (over 4 million of pigs).

ASF control measures

- Culling of all animals on the outbreak farm
- Establishing of a 2 km protection zone around the outbreak farm - Depopulation of all pigs in that area
- Establishing of a 100 km surveillance zone around the outbreak farm – Movement control of pigs; it is not allowed to take pigs and pork products out of the zone without official permission.
- Depopulation of all back yard pigs in Belarus kept in an area of 5 km around commercial farms.

- Intensive hunting of wild boar with the scope to eliminate all wild boar in Belarus.
- Enforcement of biosecurity measures on the farms and education of farmers, veterinarians and other stake holders.

Monitoring and surveillance programme

The present ASF testing regime of domestic pigs conducted in Belarus is requested by the Russian Federation for trade purposes. In commercial farms independently of their size following tests are carried out on a monthly basis:

- Serological testing of 10 randomly selected pigs for the presence of ASF antibodies (ELISA test)
- PCR testing of organ material from 5% of dead pigs

Furthermore 4% of the slaughtered animals are PCR tested. The samples are taken at the abattoir.

For example in the Lida district, where two large commercial farms are located 18 organ samples for PCR testing and 60 blood samples for antibody testing have been taken during the first three months of 2015 (3 organ samples and 10 serum samples per month per farm). The two commercial farms have a yearly capacity of 24.000 and 12.000 pigs respectively.

Pigs from the backyard sector are inspected at slaughter during home slaughtering by a veterinarian. In case of suspicion organ samples are taken for ASF testing.

Concerning wild boar all animals found dead have to be tested for ASF. From the hunted animals in each district (the Grodna province has 17 districts) three blood samples for serology and three organ samples for PCR testing have to be tested on a quarterly basis. For example in the Lida district which has a size of 120.000 ha 41 wild boar were hunted during Januar-March 2015 and one wild boar was found dead. Three serological tests and three PCR tests were conducted. It is estimated that the actual wild boar population consist of 68 animals. It is planned to hunt them all until 1st of May 2015. Last year 280 wild boar were hunted in the Lida district.

ASF risk factors

A scientific risk assessment (e.g. following OIE guidelines) for Belarus determining the main ASF risks for domestic pigs and wild boar has not been conducted so far. However, the following risks have been hypothesized during the visit of the SGE team by the Central Vet Authority.

Contaminated feed: It is believed that ASF contaminated feed from the Russian Federation entered Belarus in 2013. As a measure now only local produced feed which has been treated for minimum 15 minutes at 70°C is allowed to be given to the pigs.

Infected wild boar: Although ASF has never been reported in wild boar in Belarus, wild boar are seen as a major factor of disease spread. It is believed that ASF is penetrating into Belarus with infected wild boar from the EU, Ukraine and RF.

It was hypothesized that in a first step ASF virus is carried by hunters and farmers into the back yards. In a second step the virus is transported by people (farm workers) in larger commercial farms without sufficient biosecurity measures. The consequence of this hypothesis was a radical reduction of the wild boar population as well as the depopulation of all back yard pigs within a 5 km radius around commercial farms. In 2014 about 40.000 wild boar have been hunted in Belarus. However, since so far no positive wild boar have been reported the hypothesis regarding the chain of infection which starts in the wild boar population is lacking evidences.

Vehicles transiting Belarus: Since Belarus is a transit country a huge risk of virus introduction is seen with vehicles (trucks, cars) which are on transit through Belarus coming from neighbouring countries.

Conclusions and recommendations

The veterinary service in Belarus is well structured, having a clear chain of command. Sufficient veterinary inspectors are employed at the different central and regional levels ensuring that the veterinary service is able to react fast in case of a crisis. Furthermore the veterinary service is well linked with other state bodies involved in disease control and eradication (e.g. police, local administrations, state hunting associations, etc.).

The Ministry of Agriculture together with several other Ministries (Interior, Finance) have elaborated a detailed operational manual for handling the ASF crisis. The manual is addressing the responsibilities of all institutions involved at the different administrative levels. Based on this manual, which is legally binding, disease control measures are conducted.

So far the monitoring and surveillance activities for ASF are following the request of trade partners but they are not taking into account the epidemiological particularities and risks posed by ASF. The control activities are not based on scientific grounds which take into considerations the biology of ASFV. Therefore, the monitoring and surveillance data for domestic pigs and wild boar are insufficient and inadequate to provide a realistic epidemiological picture of ASF in Belarus (presence or absence).

It is strongly recommended that an independent national expert group should be established to assist the central and local veterinary authorities. The group should consist of epidemiologists, risk assessors, laboratory experts, wild life experts. On the basis of the epidemiological situation and a properly conducted risk assessment following OIE guidelines, the group should define:

- the appropriate measures of surveillance/control;
- a sampling scheme;
- a testing regime for clinical and laboratory examinations.

The surveillance and monitoring activities should be based on the biological characteristics of ASFV. Surveillance in domestic pigs should be focused on ASF early detection. Surveillance in wild boar should mainly address dead animals in the areas considered at risk. In this regard risk areas should be defined based on a risk assessment and a statistically significant number of wild boar should be tested. A better sampling regime for domestic pigs and wild boar does not necessarily imply that more tests have to be conducted. Important is to test a significant number of relevant animals with the right test system.

Furthermore the advising scientific group should evaluate the epidemiological findings and laboratory results on a monthly basis. The proportionality and effectiveness of measures should be checked continuously.

ASF training courses for veterinary inspectors at central and regional level following OIE guidelines are recommended. In particular the epidemiological aspects of the disease should be discussed and elaborated.

Belarus is planning to increase the pig production. In this regard it is recommended that from the beginning the concept of biosecurity for the prevention of ASF should be integrated in the

planning and construction of new pig farms. These measures should have priority in regard to other measures.

Final remark: The working atmosphere during the mission was very good. The colleagues from Belarus gave all their support and assistance to facilitate a fruitful mission. The SGE team wishes to thank all colleagues from Belarus for their support and help given. All requested information and explanations were promptly received by the SGE team. Furthermore the support given by the two interpreters, Mr Burdenkov and Mr Korzh was excellent and very professional.

K. Depner
SGE, team leader

20.04.2015

Annex 1
Agenda of CVET in Belarus; April 12-17, 2015

Date	Time	Place / Activity
12 April		Arrival of SGE team in Minsk
13 April	15:00- 18:00	Opening meeting at the Department of Veterinary and Food Surveillance, Ministry of Agriculture and Food, Minsk
14 April	9:00	Departure to the Grodna province
	11:30	Meeting at the district veterinary office of the Iviv district
	14:30 – 19:00	Visit of a commercial farm, a back yard holding and a hunting ground
15 April	9:00	Meeting at the district veterinary office at the Lida district
	14:30	Visit of the village where the 1 st ASF outbreak occurred in a back yard holding in 2013
16 April	10:30 – 16:00	Final meeting at the Department of Veterinary and Food Surveillance, Ministry of Agriculture and Food, Minsk
17 April		Departure of the SGE team

Annex 2

Template for on the spot visits in Lithuania – Belarus – Poland – Russian Federation – Latvia - Ukraine – Estonia

The visit should include at least two separate field visits in two separate locations. In each of these locations the following aspects should be covered:

- Visit a local veterinary office dealing with field work for a discussion with the official veterinarians dealing with the pig sector. Figures should be provided to the experts on local pig production on both industrial and backyard farms together with biosecurity practices and an overview of activities by the veterinary services.
- Visit of 2 or 3 medium to large pig farms (without entering the premises, so just seeing the farm from the outside for biosecurity reasons) and discussion with the farm owner/manager outside the farm or in the administrative premises.
- Visit to 1 or 2 hunting grounds in the infected area and discussion with forestry management officials as well as one or two representatives from local hunting associations.

In addition to the above, a short opening and closing meeting with the central veterinary services should be foreseen so to allow discussing national practices and recommendations. Data should be provided to the experts on national biosecurity measures, population estimates, regionalisation, and surveillance being carried out in both domestic and wild boar.

In order to facilitate the mission, the following information should be provided to the experts, possibly one week before the mission:

- Domestic pig data:
 - Pig population and its structure
 - ASF situation
 - What kind of surveillance is applied, and results
 - Control measures adopted to mitigate the risk of spread (domestic and backyards), and results.
- Wild boar management in the country:
 - A map of the hunting grounds
 - ASF in wild boars eradication/control strategy applied for 2014/2015 and what will be planned for 2015/2016
 - Efficiency of surveillance
 - Country self-evaluation of the strategy applied
 - Problems encountered
- Wild boar data for specific hunting grounds:
 - Applied biosecurity measures when hunting;
 - Sampling procedures
 - Wild boar estimates and hunting bag planning and achievement (how many in reality have been shot)

Annex 3

Persons involved in the discussions during the mission

Name	Function	Organisation
Dr. PIVOVAR	Deputy Minister and CVO of Belarus	Department of Agriculture and Food Supervision at the Ministry of Agriculture of the Republic of Belarus
Alexander KUTSKO	Deputy Director	Department of Agriculture and Food Supervision at the Ministry of Agriculture of the Republic of Belarus
Ivan SMILGIN	Head of Department of Supervision over the Prevention and Anti-epizootic Activities	Department of Agriculture and Food Supervision at the Ministry of Agriculture of the Republic of Belarus
Yuriy PIVOVARCHIK	Director	Belarusian State Veterinary Center
Leonid NIKIFOROV	Head of Section for Anti-epizootic Activities and Forecast of Diseases of Agricultural Animals	Belarusian State Veterinary Center
Petr KRASOCHKO	Director	Institute of Experimental Veterinary
Yuriy LOMAKO	Head of Laboratory	Institute of Experimental Veterinary
Alexander BULAK	Chairperson	Iviye District Executive Committee
Vitaliy MELYUNETS	First Deputy Chairperson	Head of Agriculture and Food Department
Nickolay KOT	Head of Veterinary Department	Agriculture and Food Department
Anton PISHCHIK	Acting Chief Veterinary Officer	Veterinary Service of the Iviye District
Vyacheslav KHOTYANOVICH	Director	Agricultural Cooperative named after BAUM
Vladimir BURDENKOV	Team Leader, Interpreter	DG SCIC
Konstantin KORZH	Interpreter	DG SCIC