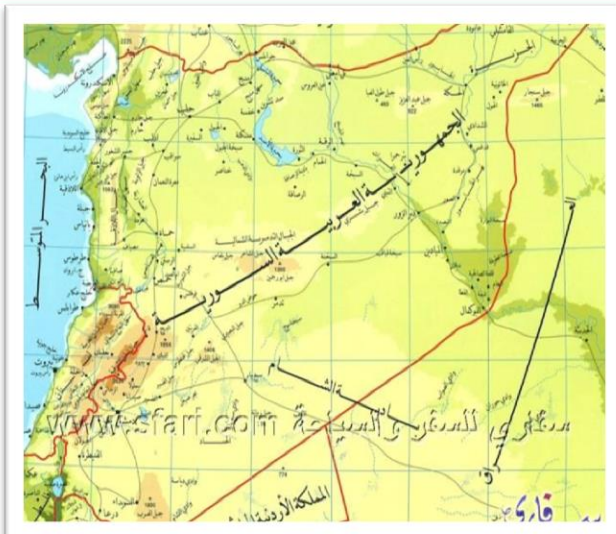




GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



FMD Report - Syria

6th Regional FMD West Eurasia Roadmap Meeting -
Almaty, Kazakhstan – 28 to 30 April 2015

Dr. Mazen Dib - Directorate Of Animal Health – Syria



Syria

Geographic Location:

Area:

Population:

Capital City :

Administrative-territorial units:

Middle east

185180 km2

24 million

Damascus

14 Provinces

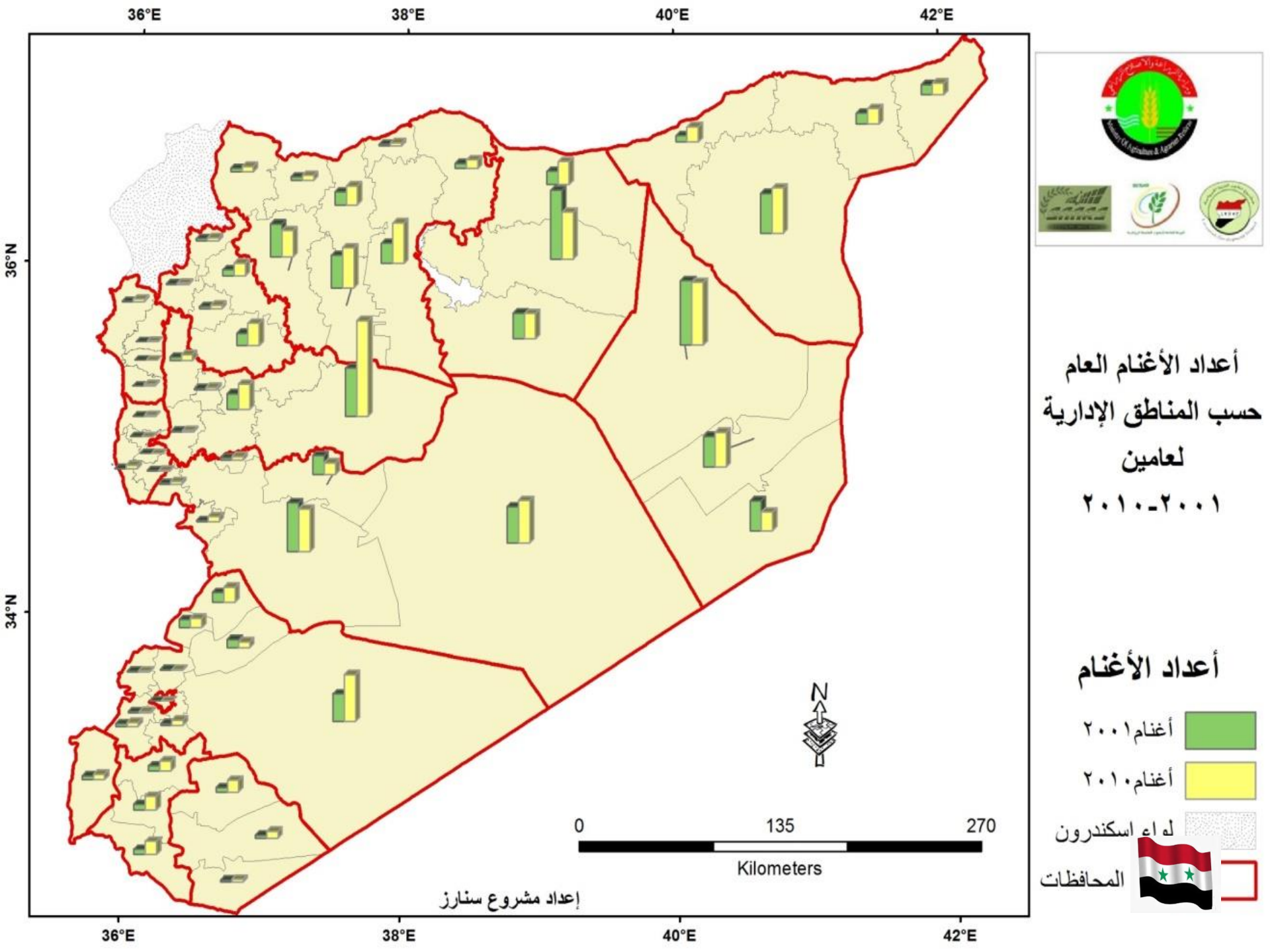


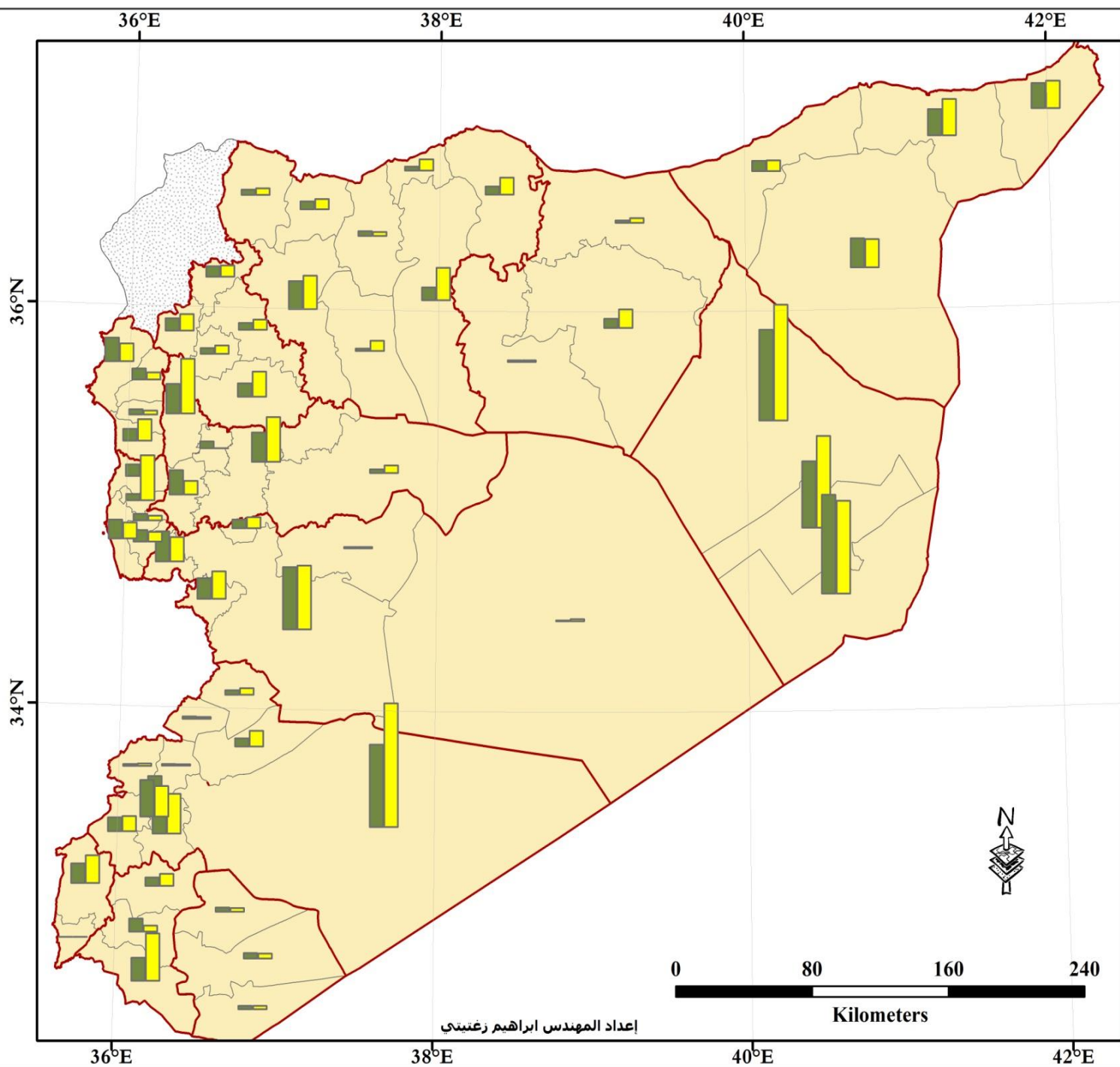


Overview of livestock in the country according to (MOAAR) 2010 statistics

Animal population in Syria	Animal products
Cattle: 1 million	Meat: 228,340 ton
Sheep: 16 million	Milk: 1,453,024 ton
Goat: 1, 5 million	Eggs: 3,265,899,000
Buffalo : 7 thousands	
Birds: 25,401,000	
Fish: 12,770 ton	
Hives: 63,0775	
Live animal export: 300,000 - 1 million sheep yearly.	









أعداد الأبقار العام
 حسب المناطق الإدارية
 لعامين
 2010 – 2001

أعداد الأبقار

2001 

2010 

لواء إسكندرون 

حدود المحافظات 





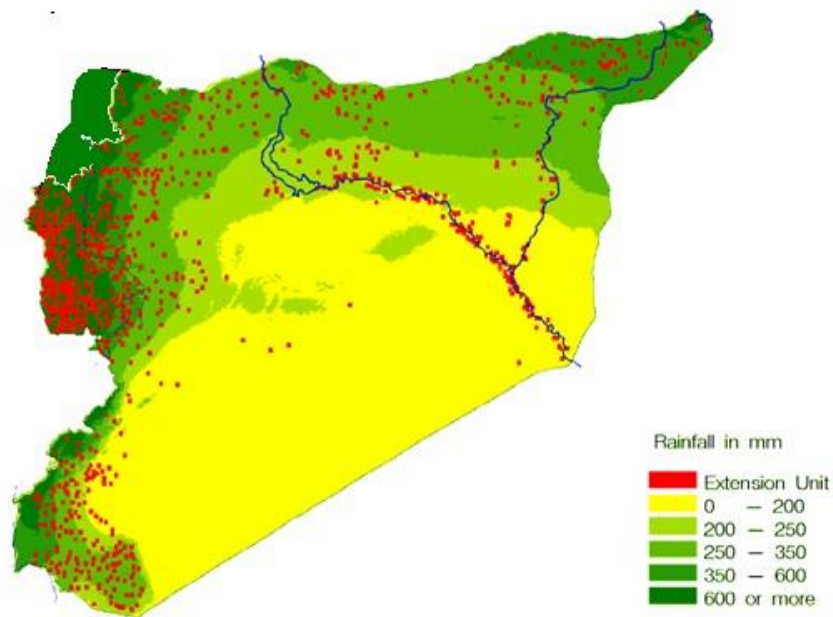
Veterinary Services

- Administration of **Animal Wealth** consist of three directorates:
(D. A. H – D.V. D – D. A. P)
- Directorate of Animal Health consist of seven departments
- Veterinarians are working in the public sector are estimated by 1500
- Veterinarians are working in the private sector are estimated by 3500
- Vet. Assistants are estimated by 6500
- The number of Extension units more than 1000
- The number of veterinary centers is 326





Extension Unites Distribution







Undertaken Procedures to Prevent the Entry of the FMD to Syria

- * Animal Wealth protection law 29/2006 determines the required legislations concerning animal wealth protection
- * A national contingency plan have been prepared to protect, prevent and control this disease.
- * A FMD Control Strategy for Syria **have been prepared in (May 2013)**.
- * In Syria there is a developed lab in the Directorate of Animal Health divided into three Departments, and there are 14 lab at provinces level.
- * Vet. Quarantine and disinfection strict procedures have been applied on border points
- * Central committees conduct visits to the provinces and Al Badia to acknowledge with the health status of animal wealth herds.
- * Slaughter houses control and immediate notification of any suspected cases within these slaughter houses.





Approaches to Disease Control

- * Early detection and prompt reporting of suspicion of FMD to limit the extent of disease.
- * Containing disease at premises where it is detected and eradicating it swiftly
- * Limiting the risk of any further spread of disease from premises connected with, or in the vicinity of, the infected premises (through National Movement bans, application of cleaning and disinfection and heightened biosecurity measures at national level);
- * Considering that vaccination as an extra control measure would help to control and eradicate the disease
- * Undertaking risk assessments based on epidemiological evidence and disease natural.
- * Continuing heightened surveillance on premises in the controlled zones before easing restrictions on a phased basis.
- * Taking decisions about control measures regarding to costs and benefits.
- * Complying with World Animal Health Organization (OIE) Terrestrial Animal Health Code.





Disease control objectives

- * Syrian veterinary authority primary objective in tackling any outbreak of FMD will be to eradicate the disease as quickly as possible.
- * To minimize the overall cost of the outbreak and the burden on the taxpayer and public as well as the economic burden of the outbreak on the food, farming and industries and the wider economy.
- * To protect the health and safety of the public and those directly involved in controlling the outbreak.

In delivering this objective, the disease control measures will seek to:

- * Minimize the number of animals that need to be culled either for disease control purposes or to safeguard animal welfare.
- * Minimize adverse impacts of disease.





FMD Control Plan

- * FMD is a notifiable disease by the law in all-susceptible animal species including wildlife.
- * Responsibilities of veterinary authority well elaborated in Animal Diseases law No. 29 of 2006 .
- * Continuous surveillance will be carried out irrespective of the disease status, with public and private sector involvement.
- * In case of an outbreak, quarantine will be imposed and properly managed, and the quarantine measures should be maintained until clinical and laboratory tests indicate that the causal agent has been eliminated.





- * Vaccination campaigns covers all Syrian herds.
- * There will be restrictions on introduction of livestock and livestock products from known infected areas within and outside the country.
- * Areas of livestock-wildlife interaction will receive special consideration with regard to FMD control strategies.
- * Research and development on FMD control will be strengthened, particularly on vaccine development.
- * There will be provision accreditation of FMD free with vaccination
- * FMD control strategies will be implemented along regional and international obligations as stipulated under internal organizations.





Progressive Control Pathway (PCP)

- * Syria participate in EuFmd Meeting and follows the PCP procedures
- * Reduce the impact of FMD and the load of FMD virus.
- * Design of control programs
- * Prevention of disease incursion
- * Active monitoring for FMDV circulation and understanding the epidemiology of FMD
- * Reduction in virus circulation and mitigation of disease risk to be achieved
- * Optimization of resources use for FMD control
- * Study the socio – economic impact and value chain





EPIDEMIOLOGY OF FMD

The routine functions of the **Epidemiological Unit** of the National Veterinary Services are:

- * The most valuable source of information from (OIE)
- * Recognize the disease quickly in different parts of the country
- * Knowing the current geographic distribution and incidence of FMD
- * Distribution fairly static or has there been a recent history of spread to new countries, regions or continents
- * Antigenic subtypes emerged that may threaten even countries that routinely vaccinate against the disease
- * FMD present in neighboring countries, where are the nearest outbreaks to shared borders





- * Past history of introduction of FMD to the country, and if it is still present in undetected endemic pockets of infection in domestic, feral or wild ruminant animals
 - * Method of the disease spread in the country
 - * Significant imports potential risk animal species, meat products or other materials for FMD, and quarantine import protocols comply with OIE standards.
 - * Secure barrier and borders import controls/quarantine procedures to prevent unlawful entry of risk materials for FM
 - * Taking in consideration susceptible wildlife to FMD animal





Reports Database and Information

- * Existing reporting systems (Immediate notification, follow up reports weekly , monthly yarely reports)
- * Immediate notifications and follow-up reports submitted by Member Countries in response to exceptional disease events occurring in these countries as well as follow-up reports about these events,
- * Reports describing the OIE-listed disease situations in each country (WAHID system)
- * Annual reports providing further background information on animal health, on laboratory and vaccine production facilities, etc.
- * Disease distribution maps
- * Detailed country disease incidence
- * Disease timelines





SP – NSP Surveys

- *Annual animal sera surveillance has been acted to detect the antibodies level post- vaccination with Ab Det ELISA Test.
- *SP – NSP Surveillances are applied on cattle and sheep
- *Epidemiological studies section sets up a plan to conduct the surveillance and the required instruction to collect samples.
- * All Syrian provinces are included in the surveillances.
- * The diagnostic materials (Elisa Kits for SP Survey) are provided with the vaccine in the same contract.
- * The samples are collected after 21 days from the vaccination for SP Survey (PVM).





- * Annual Tested samples about (3000 sample LR – 2000 sample SR)
- * The results of this surveillance are analyzed, studied and compared with the previous results.
- * Results of titration tests to detect the antibodies levels should be complied with the international standards.





Capacity Building and Training

- *Participating in the international and regional conferences and workshops.
- *Participating in training courses outside the country which are organized by the international and regional organizations.
- *Conducting training courses for the veterinarians staff working in the provinces
- *Conducting field training days in order to know how to deal with the suspicious cases in case of their occurrence.
- *Setting up scientific publications about the disease
- *Holding symposiums and lectures defining the disease and the significance of the vaccination.
- *Resorting to Mass Media (newspaper-radio-TV) in order to educate people about the disease or to notify of the vaccination campaigns.
- *Conducting groups extension meeting for farmers







Syrian Vaccination Policy

- The inactive vaccine of FMD which is used in Syria contains the following strains: (O pan Asia2-A Iran 05-Asia 1).
- The MAAR announces about this vaccine through an external bid according to strict terms including vaccine test and its evaluation in the reference labs, **but** in case of the impossibility of this step, the vaccine is locally tested through safety and antibodies levels testes post-vaccination and by the attendance of a foreign specialized expert as well as a specialized commission selected from DOAH and another scientific sides like Directorate of Veterinary Drugs and Veterinary Medicine Faculty and expert from vets syndicate, where animals are vaccinated with the mentioned vaccine and their blood samples are tested pre-vaccination and then these samples are tested after 21 days of vaccination, in order to implement Elisa test to detect the antibodies, and titration test to detect the antibodies levels and the results should be complied with the international standards.





- * FMD vaccination is obligatory and free of charge
- * Cattle vaccination is applied twice a year, and sheep is vaccinated once a year.
- * The vaccination strains is selected according to the following **considerations**: the health status in Syria and the neighboring countries, and OIE - FAO – WRL recommendations.
- * The vaccine is received , activated and distributed chilled to all provinces.
- * The vaccination covers all Syrian areas.
- * Purchased doses in 2014 (7 million)
- * Central commissions follow -up the vaccine process at the field.
- * Civil society, private vets, and vets syndicate support and help in vaccination campaigns and samples collection in crisis areas.





LABORATORY

FMD diagnosis lab (DOAH) consists of **three** units as the following:

- Sera tests unit.
 - Cell culture unit.
 - PCR unit.
- The following **tests** are conducted within this lab:
- Ag Det ELISA Test.
 - Ab Det ELISA Test.
 - NSP Ab Det ELISA Test.
 - Cell Culture.
 - Real Time PCR.
- Syria participate annually in WRL (Pirbright) Proficiency Tests
- Control of pathogens: Movement of samples containing (or which might contain) FMDV to laboratories is regulated and controlled under the OIE recommendations (**OIE Manual**)







Socio- Economic impact of FMD

- *Animal Wealth is great importance in the Syrian economy and forms 18.6% of the national income.
- *Workers in animal wealth sector are estimated by 20% of the labor force in Syria.
- *Workers in agriculture sector are estimated by 8 millions.
- *The annual income of agriculture production is 362 million Syrian pounds (m.s.p).
- *The annual income of animal production is 130 m.s.p.
- *The government provides most of the required support to animal health breeders and in particular fodder, vaccines and treatments.
- *Vet authorities undertaken all the required procedures to prevent the disease entry the country due to its importance and effect in economy.





Trade

- * Various measures are put in place to ensure that imported animals and products of animal origin do not present unacceptable risks to the health of other animals or to public health.
- * Decisions (301/ 2006 - 6/ 2015) arranges all the instructions related to Foot-and-Mouth Disease







Legal Frameworks

- * FMD is a notifiable disease according to the OIE standards .
- * There are a lot of decrees, laws and executive instructions control and arrange animal health act:
 - Animal Health Law – No,29 / 2006 was interpreted and updated by many decisions, and the law include all the measures for the control , prevention and eradication of notifiable disease : quarantine measures, animal movement , livestock markets , slaughter houses , stamping out , compensation and the relative responsibilities are established
 - Executive instructions for Animal Health Law
 - Animal Movements Control – Decision No 318 / 2010
 - Quarantine Procedures and Health Certificates - Decision No 4539 / 2011
 - Meat importation Decision - No 1983 / 2007
 - Trading and industry of fodder Decision - No 1738 / 2009
 - Slaughterhouses accredit from importation countries Decision - No 169 / 2007





FMD Control Strategy for Syria

- *Active monitoring for FMDV circulation and understanding the epidemiology of FMD
- * The most important element to achieve the success in this strategy is the complete control on the borders throughout setting laws to regulate animal movement (exporting and importing processes) and prevent the illegal entry and exit of animals by rusting animals processes in addition to that the vaccination and disease surveys are very important elements as well.
- *The constant communication and contact with stockholders, the local veterinary authorities, the veterinary services and agriculture concerned authorities.





- * Reduction in virus circulation and mitigation of disease risk to be achieved
- * Optimization of resources use for FMD control
- * Study the socio – economic impact and value chain
- * Moreover, the education of the stockholders, traders, breeders and workers (who are in contact with animals and observing their animals) is also of great importance to be acknowledge with FMD and its syndromes and the correct and prompt act to deal with , notify and request the help from the concerned authority throughout training the concerned persons and rise their awareness by mass media means which is as a permanent resource that throw the light on the disease and its importance .





Thank Your Attention