



Food and Agriculture
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World Organisation
for Animal Health
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Report on the FMD situation in Egypt

Consultative seminar on progress made in FMD/PPR
roadmaps for East Mediterranean countries
Beirut-Lebanon
11-12 September 2022

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GF-TADS

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



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Introduction:

- *FMD was firstly recorded in **1950** and Since **1970**, vaccination started using Strain O/Manisa (has regular vaccination with locally produced vaccine from the veterinary of serum and vaccines Research Institute).*
- *In 2006, strain **(A)**, Ethiopian sub type, was detected and vaccination had been regular bivalent strains **(A&O)** vaccine.*
- *In 2012, the first cases caused by **SAT2** strain that was identified by " AHRI" in 2012 and confirmed on March from Pirbright Lab./ UK (WRL).*
- ***Since 2012**, Egypt has O, A and SAT2.*
- *In 2018, SAT2 Libyan strain was firstly recorded which diagnosed at AHRI and confirmed by Pirbright Lab./ UK (WRL).*
- ***Since 2017**, Egypt in stage two of PCP after endorsing Egyptian RBSP.*

Egyptian RBSP:

- **Goal:** Eradication of FMD within 15 - 20 years
- **S.O:** Reduce FMD impact of clinical disease within 5 years
- **T:** Reduction of the incidence at the end of 2020 by 50 % compared with 2014,2015
- **I:** % of confirmed outbreak of the disease estimated every year
- **Baseline:** 2014 and 2015.

Target is fully achieved, the epidemiological reports proved that the numbers of confirmed outbreaks decreased about 92% and 70.9% in 2020 compared with 2014 and 2015 while 91% and 66.3% compared with 2021".

GENERAL ORGANIZATION FOR VETERINARY SERVICES

Egyptian Risk based strategic plan RBSP

Evaluation report of RBSP

2017-2021

The General Organization for Veterinary Services
(GOVS)

September 2022

Prepared by central administration of preventive medicine

Component objectives of RBSP:

Reduce FMD transmission from high risk markets to small farms & small holders.

Reduce FMD transmission in winter season within 3 years

Establishment of contingency plan in case of new incursion

Enhancement of the practical capacities of the national laboratories concerning diagnosis of FMD & vaccine quality

Understanding the risk of viral introduction at different borders and trails to reduce FMD transmission by smuggling animals from borders

Establish adequate monitoring and evaluation system between GOVS and all governorates

Improve biosecurity measures concerning professionals

Full understanding of animal movement and production cross Egypt

Component objectives of RBSP (progress):

Reduce FMD transmission from high risk markets to small farms & small holders.

Target is fully achieved, the outbreak investigation sheets of FMD notifications from all governorates proved that the numbers of notification “in district which located high risk markets” decreased about 97% and 84% in 2020 and 2021 respectively compared with 2015" which exceed the target (80%).

Reduce FMD transmission in winter season within 3 years

Target is fully achieved, the outbreak investigation sheets during winter seasons proved that the numbers of FMD notifications in winter season decreased about 55.3%, 99.4% and 88.9% in 2018/2019, 2019/2020 and 2020/2021 respectively when compared with 2015/2016 ".

Component objectives of RBSP (progress):

Improve biosecurity measures concerning professionals

Target is partially achieved; through awareness, training and implementation of putted SOPs

Enhancement of the practical capacities of the national laboratories concerning diagnosis of FMD & vaccine quality

Target is partially achieved, the laboratory result proved that the % of accurate fully characterized lab results is 68.8% in 2014 and increased to 91.7% in 2020, and in 2021 same % with 2014. with acceptance of 92% of vaccine batches in 2021 (vaccine quality)

Establishment of contingency plan in case of new incursion

Target fully achieved: determine his focal points from different entities including in contingency plan through official letter and A desktop simulation exercise organized in 2020 supported by EU/FMD in Cairo

Component objectives of RBSP (progress):

Understanding the risk of viral introduction at different borders and trails to reduce FMD transmission by smuggling animals from borders

Target not completely achieved so, put in OCP to be implemented in the next 4 years (tactic 5.1)

Tactic 5.2: nearly achieved

Tactic 5.3: target fully achieved

Establish adequate monitoring and evaluation system between GOVS and all governorates

Target is fully achieved, as data were received on a unified template then data submitted to the epi department which releases 6 month and annual report of different activities of FMD

Full understanding of animal movement and production cross Egypt

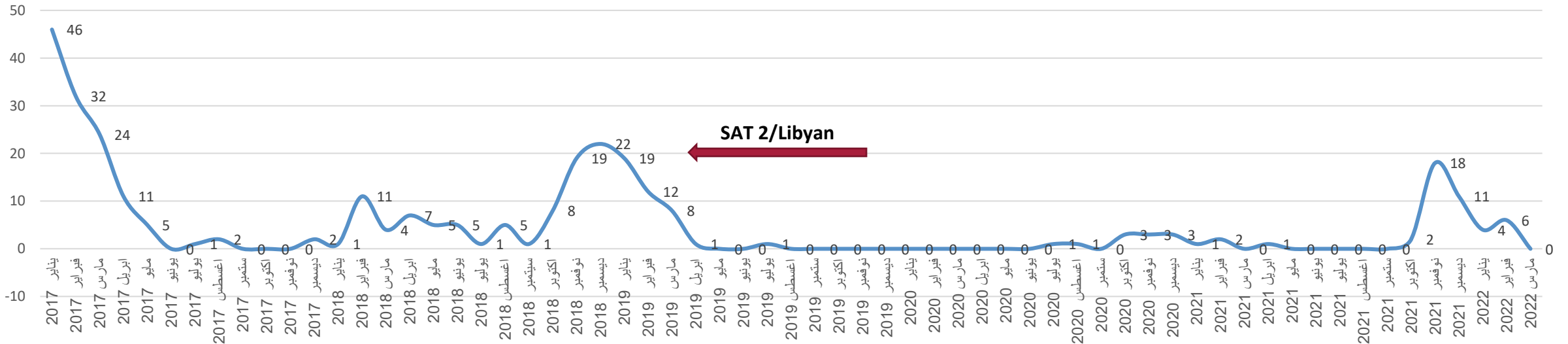
Target is partially achieved, there are ongoing activities with EUFMD and CIRAD concerning “understanding the drivers of livestock mobility” and it will be completed.

FMD situation in Egypt after RBSP implementation from 2017-2/2022:

Passive surveillance:

Year	2017	2018	2019	2020	2021	2022 (till February)
No. of suspected reported cases	480	229	108	23	77	24
No. of confirmed outbreaks	124	89	41	9	34	10

Epidemic curve of FMD 2017-2022



FMD situation in Egypt after RBSP implementation from 2017-2/2022:

Active surveillance

- **Active clinical surveillance** (epi teams all over governorates investigate the animal health status).

No.	Items	Total no. (8/2020 till 2021)
1	Total no. of visited villages	4602
2	Total no. of visited houses	70458
3	Total no. of investigated animals	281688
4	Total no. of suspected cases for FMD based on clinical signs	7

- **NSP-Antibody sero-survey: 1/11-1/12/2020**

- ✓ **Objective:** Estimate % of NSP in 6 border governorates which considers as a high risk area for introduction of new strains or sub strains for FMD and other diseases, detection of circulating serotypes and subtypes if active clinical cases were found
- ✓ **Methodology:** Collect of 1682 serum samples from different species in 6 governorates, detect clinically active cases
- ✓ **Result:** **11%** of serum samples was positive for NSP with no active clinical cases

FMD situation in Egypt after RBSP implementation from 2017-2/2022:

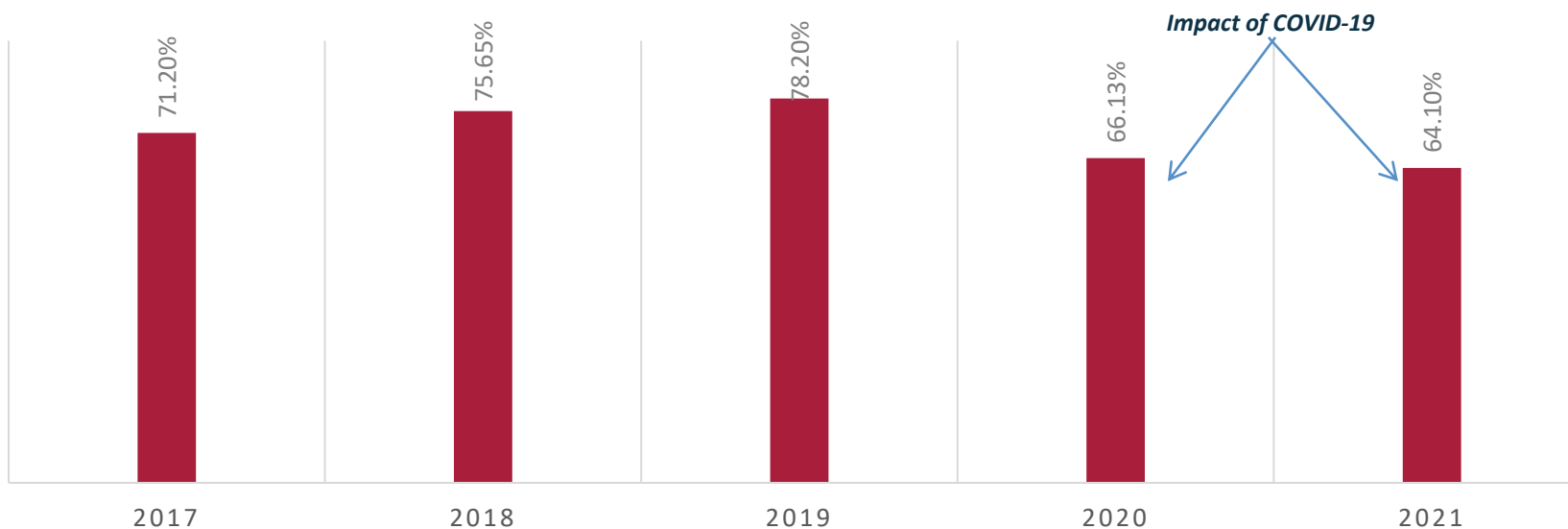
Vaccination

Vaccination strategy: 3 times/year all over the country

Vaccine serotypes (formulation): A, O, SAT2

Target population: focusing on large ruminant

Year	2017	2018	2019	2020	2021
	large	large	Large	Large	Large
% of coverage (Average/year)	71.2%	75.65%	78.2%	66.13%	64.1%



FMD situation in Egypt after RBSP implementation from 2017-2/2022:



ACTUAL STAGE	2
Statements answered	93
Statements missing (further considered as Not Completed)	0
Total statements	93

	Completed	Not completed
PCP-FMD STAGE 1	82%	18%
PCP-FMD STAGE 2	82%	18%
PCP-FMD STAGE 3	70%	30%

**Official Control Programme
for
Foot and Mouth Disease
OCP-FMD**

Egypt, 2022

Version: 1

outcomes of the Self-Assessment Tool

First version of OCP on 2/2022

FMD situation after 2/2022 “In Egypt”

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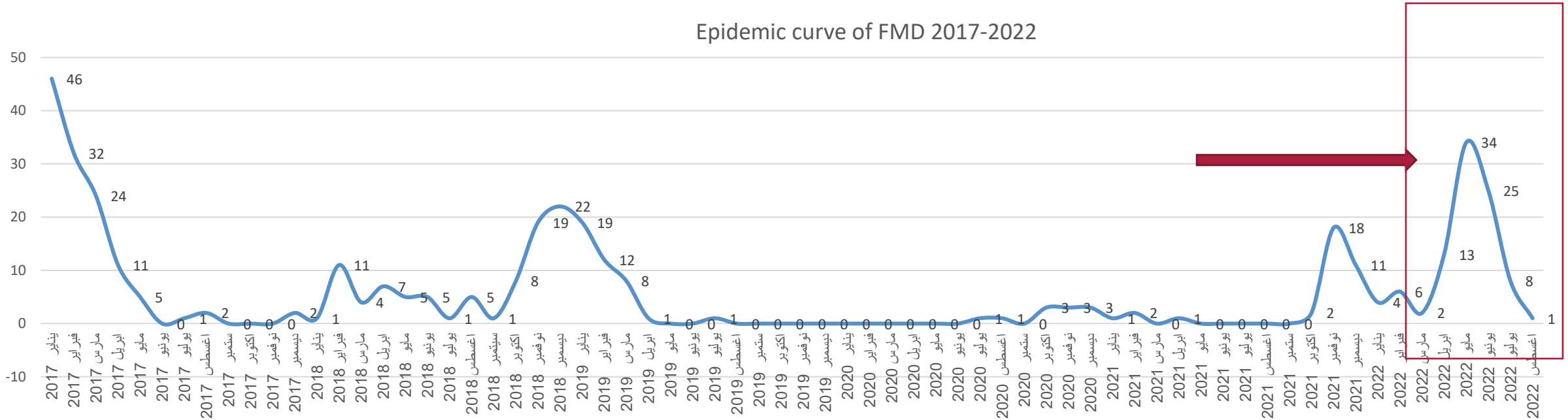
EuFMD Workshop: Simulation Exercise for FAST Diseases
Cairo, Egypt -17-19 February 2020

Foot and mouth disease contingency plan

Central administration of preventive medicine

Current FMD situation in Egypt in 2022

- On 4/2022, Increasing number of FMD notifications. We received the results from the National Animal Health Research Institute (AHRI) with isolation of **mutated A/Africa IV and A Euro-S America**.



Confirmed outbreaks in 2022

Current FMD situation in Egypt in 2022

Vaccination

- *Vaccine production sectors produce vaccine and used immediately after production during the second campaign on 7/2022 to containment the crisis.*
- *The second vaccination campaign started from 14/7/2022 (Adha vacation) and ongoing.*
- *CAPM follows up vaccination campaign through 107 mission until now.*
- *The vaccination coverage for large ruminant **until now** reach (54.3%) and for small ruminant (32%).*

Current FMD situation in Egypt in 2022

Biosecurity measures:

- *Strict implementation of biosecurity measures concerning professionals to reduce risk of FMD transmission especially during vaccination campaigns and any suspicious cases.*

Current FMD situation in Egypt in 2022

Awareness:

It focuses on sending key message to owners which aimed to increase awareness about :

- *Importance of Vaccination, Identification and Registration (I&R)*
- *Symptoms and Economic losses of disease*
- *Reporting to authorized clinic*
- *Basic of biosecurity and how to deal with diseased animal*



12255 awareness seminars held before and with vaccination campaigns until now all over governorates.

Also, used social media and news as,

<https://www.almasryalyoum.com/news/details/2665839>

Current FMD situation in Egypt in 2022

Response measures to FMD outbreaks

- *Rapid response teams for any suspicious cases*
- *Increase awareness regarding (isolation of infected animals, movement control and quarantine measures)*
- *Target surveillance around the foci.*
- *Closure of livestock markets during outbreaks.*
- *Symptomatic treatment to prevent secondary bacterial infection and subsequently reduce the losses.*
- *Ring vaccination in area of radius 10 km around the suspected foci.*
- *Quarantine of infected premises until 21 days from the last death or last cured case*

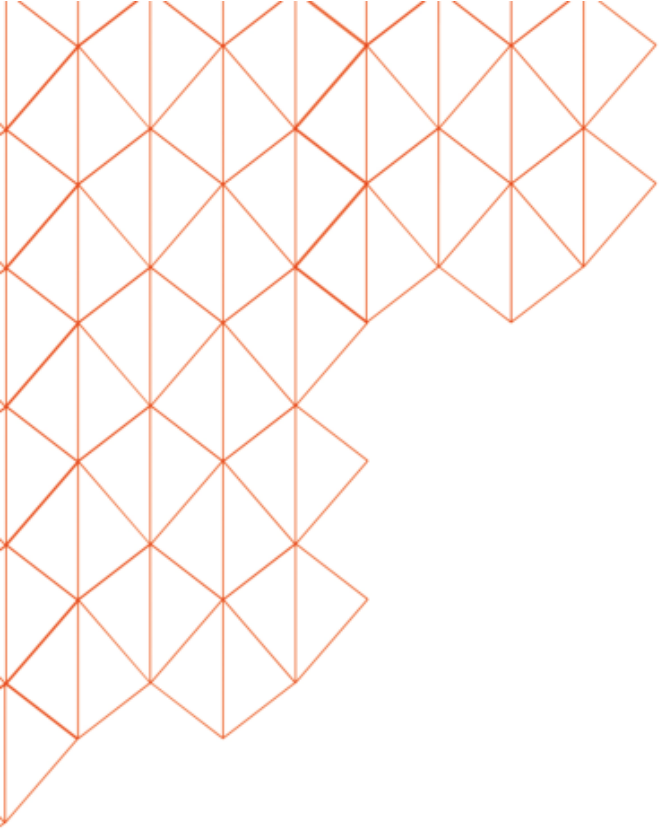
Ongoing active clinical surveillance

Challenges faced in implementation of RBSP:

- *Conduct risk assessment at border governorates*
- *Conduct post vaccination monitoring and lack of NSP kits,*
- *Farms owners refused to involved in the post vaccination monitoring study in (due to designed study including sentinel animals)*
- *Complete updating value chain and understanding of animal mobility for all sectors*
- *Lack of Financial support to complete training programs on:*
 - *Implementation of biosecurity for professional*
 - *the requirements to filling the different data sheets*
 - *advanced outbreak investigation*
- *The used vaccine with short duration of immunity so, implement 3 vaccination campaigns.*

Possible solutions and assistance/support needed.

- *Need technical support to produce vaccine with long duration*
- *Diagnostic kits to determine NSP (post vaccination monitoring and estimate % of NSP)*
- *Technical assistance concerning risk assessment*
- *Training pragmas on:*
 - *Implementation of biosecurity for professional*
 - *the requirements to filling the different data sheets*
 - *Monitoring and evaluation*
- *Complete study of animal mobility*
- *Measure the effectiveness of regular awareness and communication campaigns*



THANKS

Thanks

