APPENDIX 11

FAO/OIE

GF- TADs

GLOBAL FREMWORK FOR THE PROGRASSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

REPUBLIC OF IRAQ

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Introduction

- Foot and mouth disease (FMD) is endemic in Iraq .
- Disease known clinically in Iraq since 1937 . But the scientific monitoring of the disease and diagnosis began in 1952 As the most countries of ME region the main virus serotypes occurred in Iraq (O,A,Asia) .
- The virus serotypes recorded in Iraq which was diagnosed by Pribright (WRL) documented in FAO- 1999 are as follows :

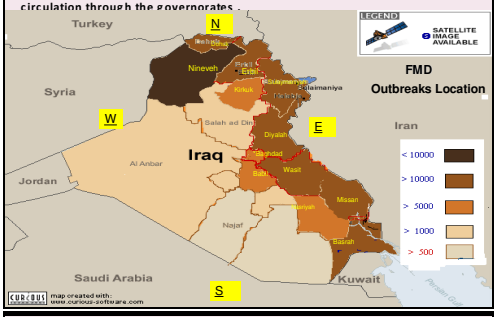
1952	1955	1957	1959	1963	1964	1965
O	A	O	SAT 1	O,A22	O	
1969	1970	1973	1975	1978	1983	1984
O	O , A	O	Asia 1	A	Asia 1	Asia 1
1985	1993	1998	1999	2000	2002	
O 1	O 1	O manisa	O manisa	A Iran96	A Iran99	

Current FMD Situation

- During 1998 – 1999 Iraq has been severely affected (13 governorates) by O manisa , which affected large and small ruminants (Cattle ,Buffalo,Sheep, Goat) with total infected cases about
  - 2,594,504 in sheep and Goat (population 14,432,976) 18%
  - 145,060 in cattle and buffalo (population 1,484,606) 13%
- Since 2000 disease reported every year (depended on monthly reports through 18 vets. Services 1n Iraqi Governorates (, without typing the virus through local and Reference Laboratories because of :
  - The bad security situation of the country .
  - The lack of the lab. Facilities for identify and typing the virus .

Except in north Governorate (Kurdish area) with the cooperation and the specialist of FAO, virus subtype A (Iran 96) was identify in Pribright lab (2000 and 2002) .

•Building the information contained in the monthly reports from the veterinary services of (18) hospitals in the country can be summarized data on the disease during the years between 2000 – 2008 and shows the virus circulation through the governorates .

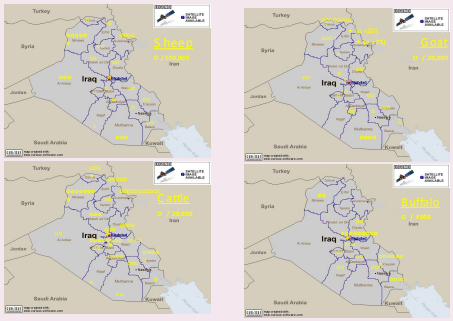


Country – Livestock (Livestock census)

- The estimated livestock populations for Iraq in 2006 (According to Village and Animal Assemblies Coding System) are as follows :

No	Governorate	Animals Population				
		Sheep	Goat	Cattle	Buffalo	Camel
1	Nineveh	3806992	174939	165562	9695	1297
2	Kirkuk	851104	44721	49171	301	0
3	Slahddin	1180325	15015	69917	103	0
4	Anbar	1445364	38637	39671	438	383
5	Diyalah	1019550	47458	82303	6768	0
6	Wa sit	813400	92578	76690	2694	686
7	Baghdad	237763	23816	65315	36664	0
8	Babel	518473	24086	160750	13759	1591
9	Karbala	318448	10016	31523	12923	744
10	Najaf	472479	0	24845	8692	0
11	Diwaniyah	385961	44046	73091	8376	0
12	Muthanna	1320301	85476	34023	2391	2301
13	Nasriyah	587790	6943	72268	11467	10
14	Missan	746651	26837	99222	14020	2063
15	Basrah	89188	5069	20053	17801	0
16	Dohuk	509802	160612	60866	441	0
17	Erbil	548049	407184	109903	92	0
18	Sulaymania	1959398	1501092	215669	209	0
	Total	16811038	2708075	1450842	146824	9,048

(Country Livestock (Distribution)



Country – Livestock(Livestock Husbandry)

- Cattle and Buffalo are kept as small contained herds living in the villages and towns or their environs mostly near the rivers . They have a restricted movement outside the village , and fed on limited local grazing supplemented with seasonal crop residues.

  Numbers of larger commercial dairy "stations" with several thousand animals have become less active due to the current situation in Iraq.

  Buffaloes have a more localised distribution than cattle predominantly are found in the southern marshes of Iraq (Basrah, Nassiriyah and Missan, Wasit) , and governorates near the two main rivers in the centre of the country (Babel and Baghdad), and in (Nineveh) in the North .

  SHEEP have a wider distribution in the country than cattle and buffaloes , they are kept under semi-closed condition in the riverine villages and towns and grazed on local pasture, In some governorates (Nineveh,Anbar,Salahddin,Muthanna and Najaf) the sheep flocks range over much larger areas in search grazing and move between governorate and cross international

FMD control strategies

- Strategic plan in place in the country to control the disease is based on vaccination programs for cattle and sheep in all Governorates managed by vets. teams in each vet. clinc.
- Table below show vaccination numbers and % in Governorate during 2006 – 2008 .

No	C	---------vaccinated animals --------- Sheep , Goat	Cattle ,	TOtal	%
3	2006	4 , 959 , 968	477 , 000	5 , 436 , 968	%34
4	2007	2 , 702 , 728	205 , 368	2 , 908 , 096	%18
5	2008	2 , 530 , 586	134 , 225	2 , 664 , 811	%18

- In 2008 , veterinary authorities established the Iraqi National Center for Transboundary Animal Disease (TADs center) , which have 2 TADs centeral labs. and oversees field teams in all the 18th Governorates.
- The main TADs center missions is to control the main list A OIE diseases by monitoring and early warning diseases, FMD one of them.
- The Center now has the task to conduct a serosurvailance for FMD followed by isolation and identification local FMD viral strains through cooperation and assistance of OIE /FAO and reference laboratories.

Vaccination

- Two types of (Oily) vaccines used ;
  1. Trivalent (O1 , A22 , Asia 1)
     Dose used : 2ml = Cattle , Buffalo \ 1ml = Sheep , Goat
  2. Monovalent (O1) : 1ml = Sheep , Goat
- Vaccination implemented ; yearly in Cattle , Buffaloes , Sheep and Goat . (+urgently)
- No local production of vaccine .
- Amount of vaccine imported /Year :
  1 . Trivalent – 2,500,000 dose (Rakish –India)
  2 . Monovalent – 5,000,000 dose (Vital – Turkey)
- Quality control department of State Company of VS responsible for evaluation of all imported Vaccines before use .

Iraqi Veterinary Laboratories

Iraqi Veterinary Laboratory

		Baghdad	Erbil
Biosaftey		2	2
Assay	Virus	Yes	NO
	Cell Culture	Yes	NO
	ELISA	Yes	Yes
	PCR	New established	Yes
Professional		4	4
Technical Staff		4	4
Resources		Iraqi University	
No. of samples	2006	Virus isol. = 1 Serology = 37	---
	2007	Virus isol.= 3 Sero .=	---
	2008		---

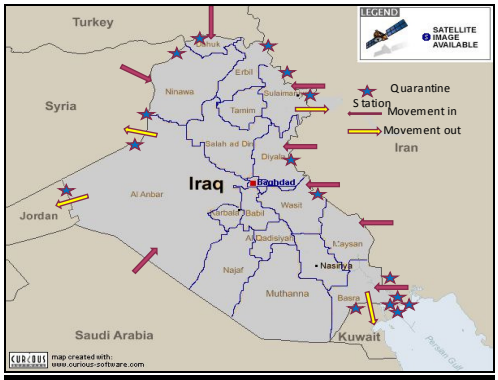
Iraqi Epidemiological Unit

- Field teams in all Iraqi Governorates send a reports to the TADs center monthly , in addition to the urgent reports with required samples.
- Surveillance Strategies : Depending on the TADs field teams , the action will take place at once , in case of any new foci for the FMD and related diseases (inside Iraq or in the neighboring country).

- In future we plane to make a real contact with OIE to supply that organization with all events of animal health situation occur in Iraq , through the Iraqi TADs center .

Border and movement control

- The quarantine system of Iraq is managed by the quarantine department of the SCVS. Iraq ceased the legal importation of live animals for meat or livestock production after the 1985 outbreak of Rinderpest.
- Red meat and other animal products(following OIE international animal health code guide lines). are controlled through 16 permanent border points which located in :. South border (Kuwait - Gulf, Iran) 5 Quarantine
  West border (Syria , Jordon ,) 4 Quarantine
  East border (Iran) 6 Quarantine
  North border (turkey) 1 Quarantine
- Some major national markets (for alive animals) are situated close to an international border (Basrah, Missan, Diyalah, Nineveh, and Anbar Governorates) some livestock may found their away illegally to



Weaknesses in disease control

- Illegal movement of animals through international borders and the weakness in bounded measurement .
- Weakness and lack of information of viral epidemiology and circulation .
- Weakness in planning and strategic in the control programs and surveillance .
- The use of imported vaccines which may contain in its structural antigens not compatible with the local serotypes .
- The lack of laboratory supplies , especially the requirements for isolation and detection of virus .
- The lack of the cooperation with the neighboring countries .
- The absence of laboratories diagnostic activity in most governorates .

Suggestions for strengthening disease control

- Classification and identification of local viral serotypes to be included in the vaccines used for control programs .
- Determine the viral focuses to be concentrated in controlled programs .
- The use of high quality vaccines in the vaccination programs and vaccinate large number of susceptible animals to developed highly immunized herds especially near the international borders .
- Development a potential laboratories for rapid and early diagnosis of viral diseases to support the early controlling measure .
- The need of long course of training for detecting virus trough PCR technique .
- Supporting the Quarantine measures for controlling animals and animal products through the borders .

Thank you