

U Z B E K I S T A N

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Regional meeting on Foot-and-Mouth Disease to develop a long term regional control strategy
(Regional Roadmap for West Eurasia)
Shiraz, Islamic Republic of Iran
9 - 13 November 2008

Livestock population in Uzbekistan

• Cattle	7.5 million
• Including cows	3.1 million
• Sheep and goats	12.6 million
• Poultry	26 million
• Horse	168 thousand
• Camel	20 thousand
• Pig	96 thousand

Two priority issues in Livestock sector:

1. Progressive control and prevention of Animal diseases
2. Development of Livestock production

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FMD CONTROL STRATEGY THROUGHOUT THE REPUBLIC

- Around 65-70% of budget funds out of 100% is spent only to prevent FMD;
- Annual registration of total population of cattle and sheep-goats and calculation of demand for vaccine in buffer zones;
- Mass vaccination in buffer zones and random vaccination inside the country (big dairy farms/breeding farms);
- Randomly selected samples from vaccinated cattle is tested annually for Antibody level detection (Seromonitoring) by using ELISA.
- Laboratory activities by using PCR and ELISA;
- Collaborative work with International Donors.

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Number of cattle, sheep and goats in buffer zones

No	Provinces	CATTLE		SHEEP AND GOATS	
		No. of Population	%	No. of Population	%
1	Rep. of Karakalpakstan	91.8	5	83.3	4
2	Andijan	195.2	11	242.2	10
3	Bukhara	42	2	95.2	4
4	Djizak	188	11	39	2
5	Kashkadarya	71	4	560.8	24
6	Navoi	0.4	0.02	54.1	2
7	Samarqand	99	6	50.7	2
8	Namangan	214.6	12	274.8	12
9	Surkhondarya	118.6	7	334.6	14
10	Sirdarya	51.5	3	29.6	1
11	Tashkent	311.4	18	317.8	13
12	Farghana	272	15	214.6	9
13	Khorezm	102	6	80.8	3
	Total	1757.5		2377.5	

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General Introduction

- The majority of the population of Uzbekistan has a high dependence on livestock for their livelihoods.
- A major constraint to production is livestock disease. Transboundary diseases, being those that readily cross national borders, represent a particular concern.
- Control of transboundary diseases needs to be addressed on a regional basis since, with imperfect border controls, no one country can exert effective disease control without the cooperation of its neighbours.

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Current FMD Situation and Trends in Uzbekistan

- Last case of FMD outbreak was in Surkhondarya (south) region of Uzbekistan in 1991;
- Mainly cattle and small ruminants were affected;
- Clinical diagnosis of FMD was confirmed;
- Virus type/subtype were not identified;
- Since 2004 Buffer zones have been created which included 72 districts.

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Vaccination against FMD

- Until 2003 biovalent vaccine (A, O) was used;
- From 2003 Trivalent vaccine (A, O, Asia-1) has been used;
- During 2004 - 2008 4-5 mln. dose of vaccine was used annually;
- Mass vaccination in buffer zones with trivalent vaccine (A, O, Asia-1);
- Around 2.2 mln. of cattle and 1.7 mln. of sheep and goats are vaccinated twice a year annually;
- Main amount of FMD vaccine is imported from Vladimir (Russia) and partial is imported from Bayer Company (Germany);
- In Uzbekistan FMD vaccine is not produced locally;
- When vaccine is imported its quality certificate is checked carefully.
- Imported FMD vaccine will be injected to selected animals and after 21 days it will be tested for consistence of antibody titre by ELISA;
- Based on achieved results FMD vaccines will be permitted to use.

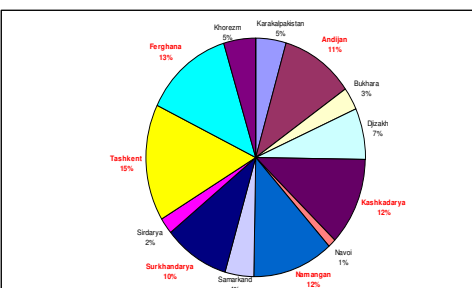
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LOCATION OF BUFFER ZONES (72-DISTRICTS), IN WHICH MASS VACCINATION IS HELD ANNUALLY AGAINST FMD



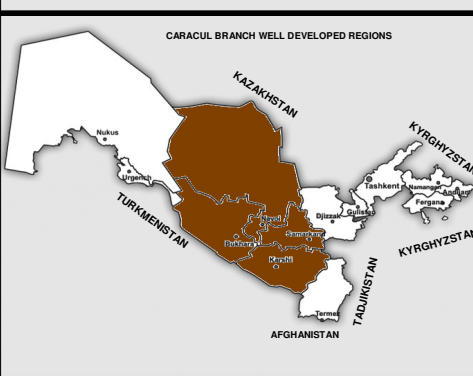
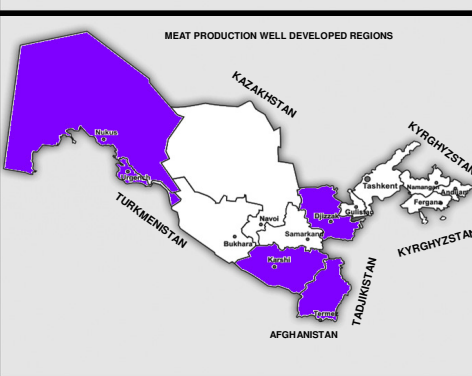
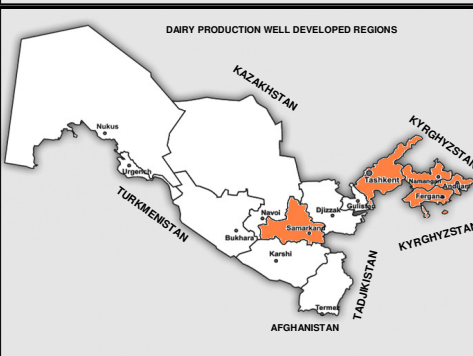
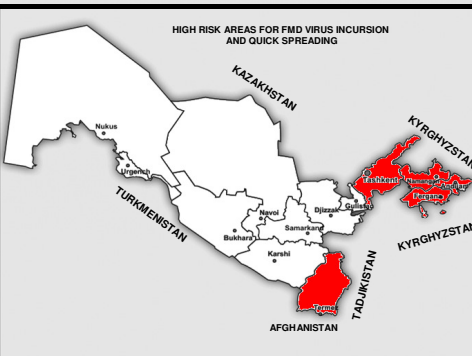
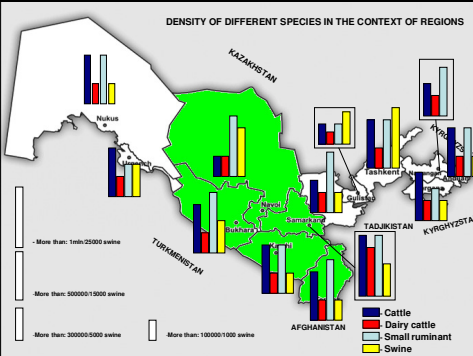
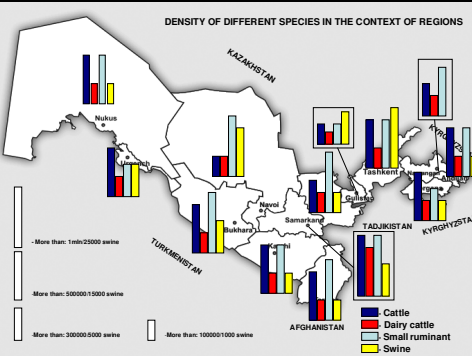
PERCENTAGE RATIO OF VACCINE NEEDED AGAINST FMD IN BUFFER ZONES, IN THE CONTEXT OF PROVINCES THROUGHOUT THE REPUBLIC OF UZBEKISTAN

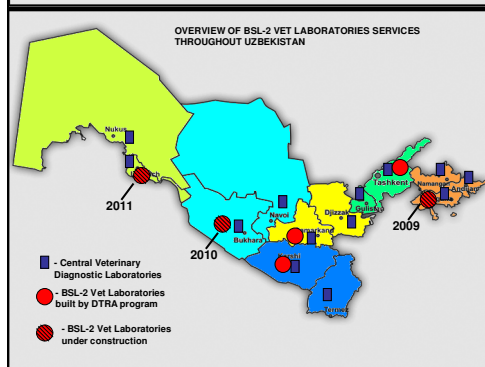
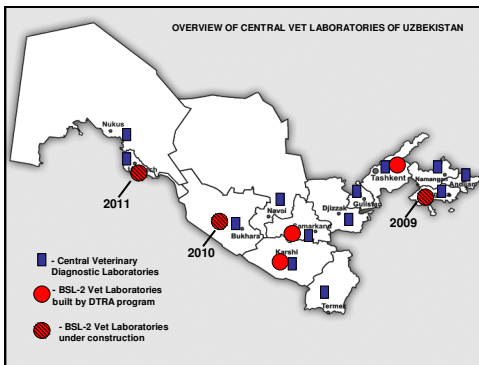
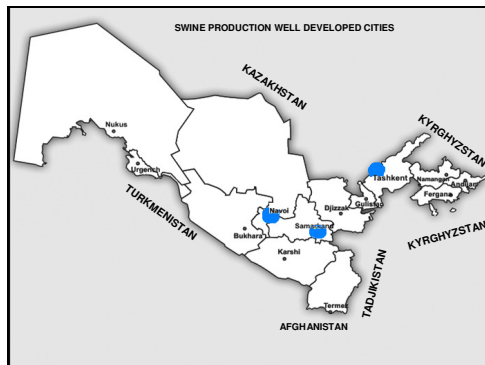


SEROMONITORING ON FMD FOR 2006-2007 (ANTIBODY LEVEL DETECTION AFTER VACCINATION)

Province	Number of tested samples of FMD serotypes							
	A-22		0-1		Asa-1			
	2006	% Ab level	2007	% Ab level	2006	% Ab level	2007	% Ab level
Karakalpakstan	80	79	100	88	80	78	100	86
Andijan	120	82	390	75	120	72	390	76
Fergana	130	82	311	77	130	82	311	75
Namangan	150	74	278	73	150	76	278	75
Khorezm			436	70		436	75	
Bukhara			247	73		247	77	
Kashkadarya			224	68		224	70	
Surkhondaryo			307	70		307	72	
Tashkent			129	69		129	71	
Sirdaryo			451	72		451	75	
Navoi			150	74		150	74	
Dizakh			150	79		150	80	
Tashkent city	80	86			80	88		
TOTAL	560		3173		560		3173	

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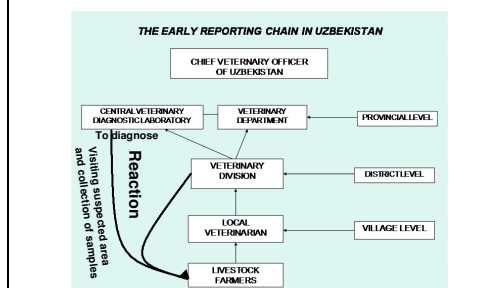




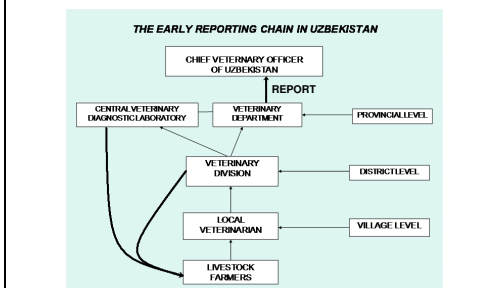
Veterinary Laboratory

- In 6 BSL-2 level veterinary laboratories of Uzbekistan that are currently under construction by DTRA biosafety, assays employed including virus isolation capabilities and cell culture system will be created and used;
- Central veterinary laboratories of provinces perform virology, bacteriology, serology, parasitology, food and feed quality control activities but most of equipment is old and needs to be renovated;
- Veterinary laboratories on district level perform the same activities except virology but they have the same problem. Therefore, all virus diseases are tested in central and national laboratories;
- Professional and technical staff in veterinary-diagnostic laboratories need to be trained with modern laboratory techniques and diagnosis;
- Every year 3000-5000 blood samples are tested on antibody level detection against FMD serotypes by C-ELISA.

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Epidemiology Unit

- Veterinary Service of Uzbekistan constantly operates a passive surveillance system for detection of any clinical cases of animal diseases.
- Each veterinarian whether a state or private veterinary officer of village submits a monthly report on the work done to the state veterinary service in a standard unified form: on vaccination, blood collection for serological surveillance, therapy, etc. All clinical cases of any disease are described in these reports.
- There is a single veterinary faculty at the Republic where more than 100 students graduate annually, also more than 300 para veterinarians graduate from veterinary colleges annually.

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Border and Movement Control

- In recent years import of dairy cattle and breeding livestock has increased in Uzbekistan;
- Mainly imported from Netherlands, Poland, France, Ukraine and China;
- According to veterinary law imported livestock is kept for quarantine during certain period in customs point farms and tested for infectious diseases like Brucellosis, Tuberculosis and etc.;
- Certificate given by exported country on livestock health statement will be carefully checked.

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Weaknesses in Disease Control

- Lack of diagnostic kits and reagents for diagnosis/studying of major infectious diseases;
- Difficulty of controlling on livestock movement and their products within the country also, lack of system of identification of animals;
- Lack of training for raising the level of skill of epidemiology and laboratory staff;
- Absence of compensation strategy for the owners of infected animals.

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Suggestions for Strengthening Disease Control (FMD and other ...)

- Providing with complete laboratory diagnostic kits and reagents for diagnosis/studying of major infectious diseases regularly;
- Rendering assistance for working out of control plan on livestock movement and their products and implementation of animal identification throughout the republic;
- Organizing systematic training activities for laboratory and epidemiology staff in OIE reference laboratories;
- Rendering support for developing of compensation strategy for the owners of infected animals.

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کھراج آرئش ASANTE SANA THANK YOU VERY MUCH

MERCI BEAUCOUP MUITO OBRIGADO

MOLTE GRAZIE MUCHAS GRACIAS...!

E'TIBORINGIZ UCHUN RAHMAT! СПАСИБО ЗА ВНИМАНИЕ!

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