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Background

- Total population of poultry in Afghanistan about 12 million
95% of poultry keeping a backyard (locally) type by women.
- 5% commercial farms.



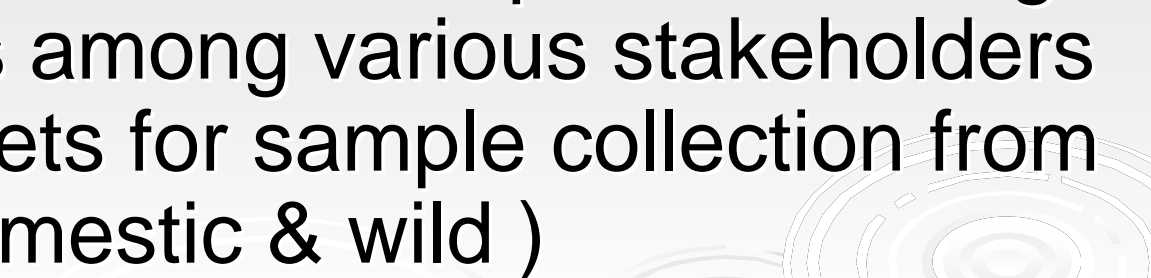
Background

- Our vet faced the outbreak without any experience on HPAI in the past.
- First outbreak in Jalalabad/Nangarhar province of Afghanistan which located in boarder of Pakistan.
- First time H5 diagnosed in 2nd of March 2006 in Kabul, confirmed by FAO and PADOVA laboratory (Italy).



INITIATIVE

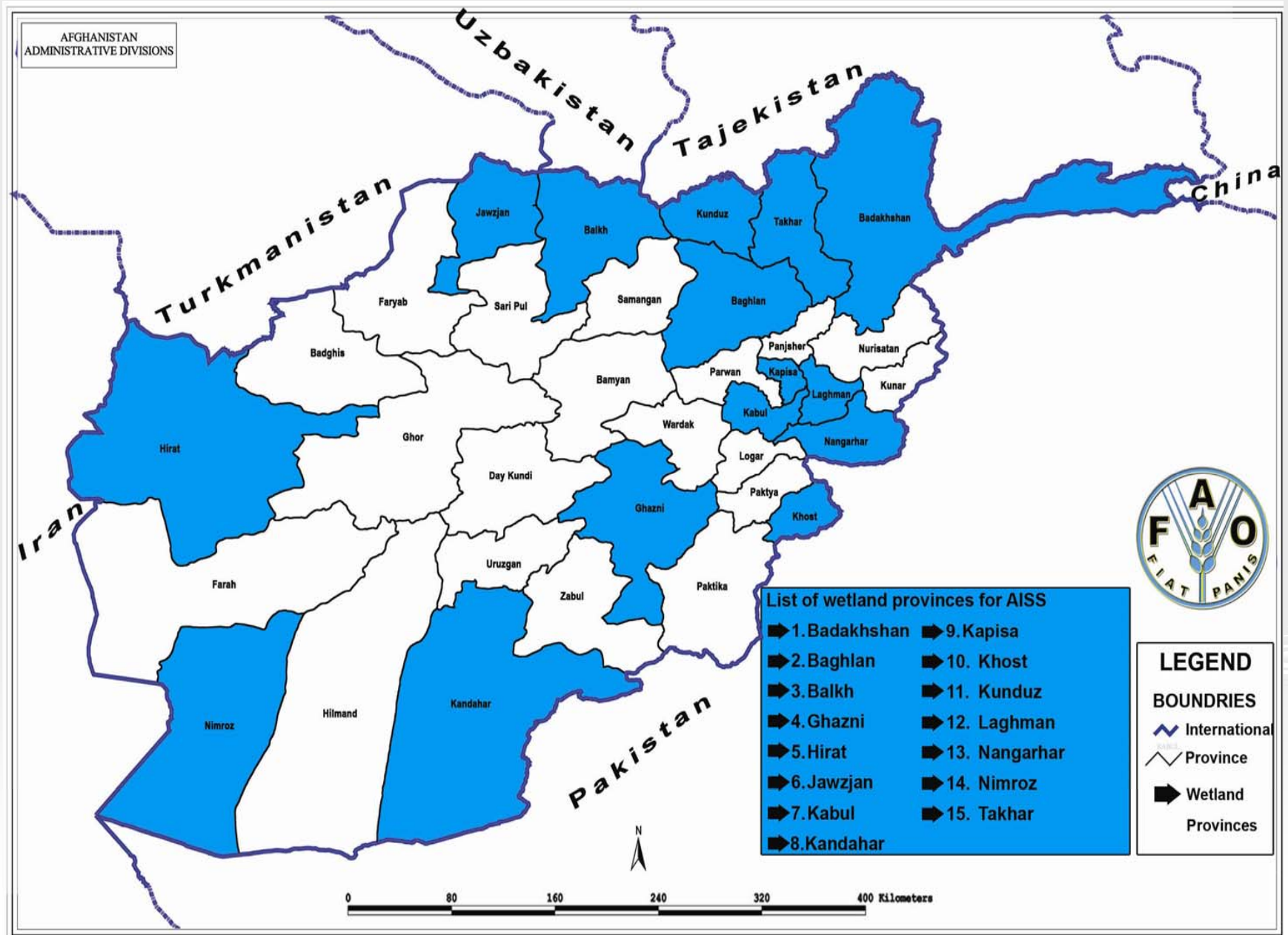
When we heard about AI in around the country:

- For understanding of outbreak we organized workshop on 27-28 of November in 2005.
 - Participants were traders, provincial vets' director, and farm owners.
 - The purpose of workshop was creating awareness among various stakeholders and train vets for sample collection from poultry (domestic & wild)
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- A decorative graphic consisting of several sets of concentric circles, resembling ripples in water, located in the bottom right corner of the slide.

INTIATIVE

- Published Book let on HPAI insecurity, farm management, AI poster and pamphlet.
- 15 wetland provinces planed for AISS (Avian Influenza Serosurveillance) which collected 1500 samples from domestic and wild birds and tested.
- .No H5 positive cases at all which was confirmed by PADOVA (Italy).

Wetland Province for AISS




INTIATIVE

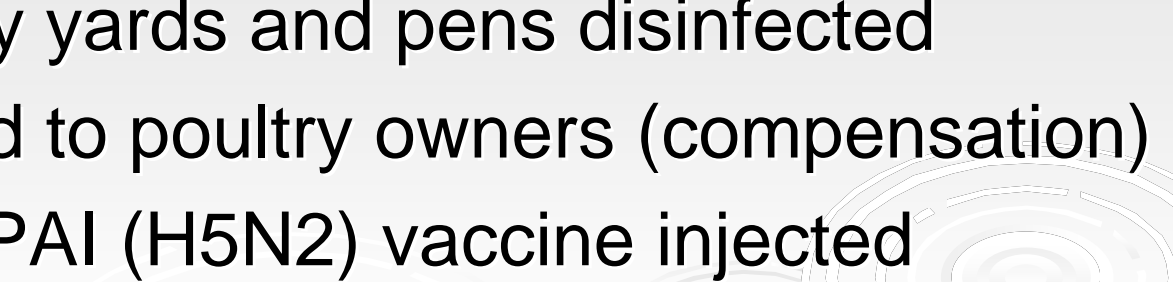
- On 27th of Feb Pakistan announced about HPAI outbreak
- On 2nd of March detected positive case in
- Jalalabad (cross border transportation through live bird).
- We have received of Migratory and domestic poultry death and individual samples from 23 provinces which totally 980 samples tested and confirm by PDOVA laboratory (Italy) which 44 were positive out of it. 26 were positive to sub type H5 and 18 were positive H5N1.

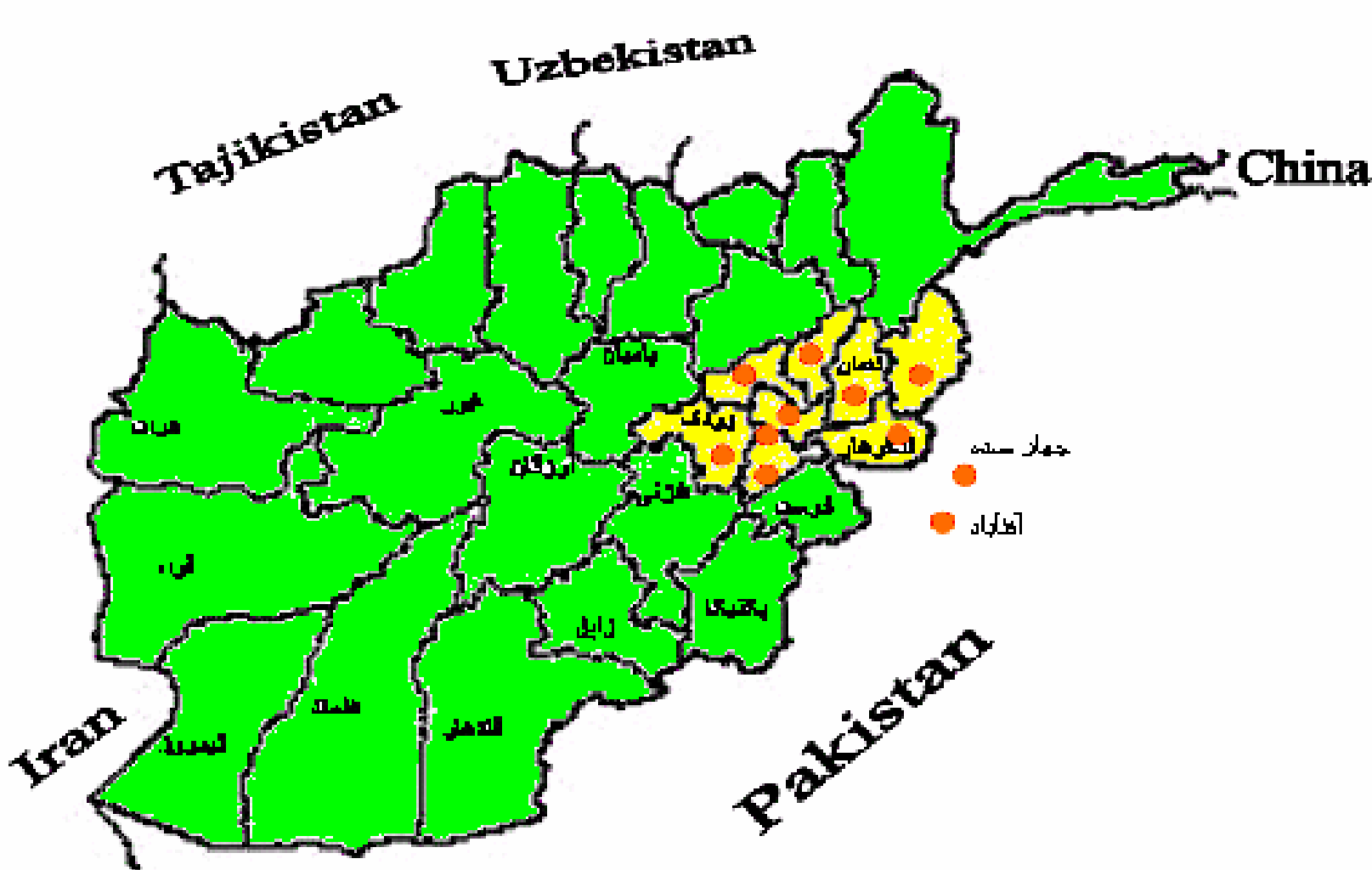
ACTION PLAN

➤ **Formation of three committees:**

- 1- Afghanistan National HPAI control committee lead by MAIL, MOPH and Environment Protection Department.
 - 2- Technical committee (Technical staffs and organization).
 - 3- Finance committee –Donors' **including Ministry of Finance.**
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HPAI H5N1 in 2006

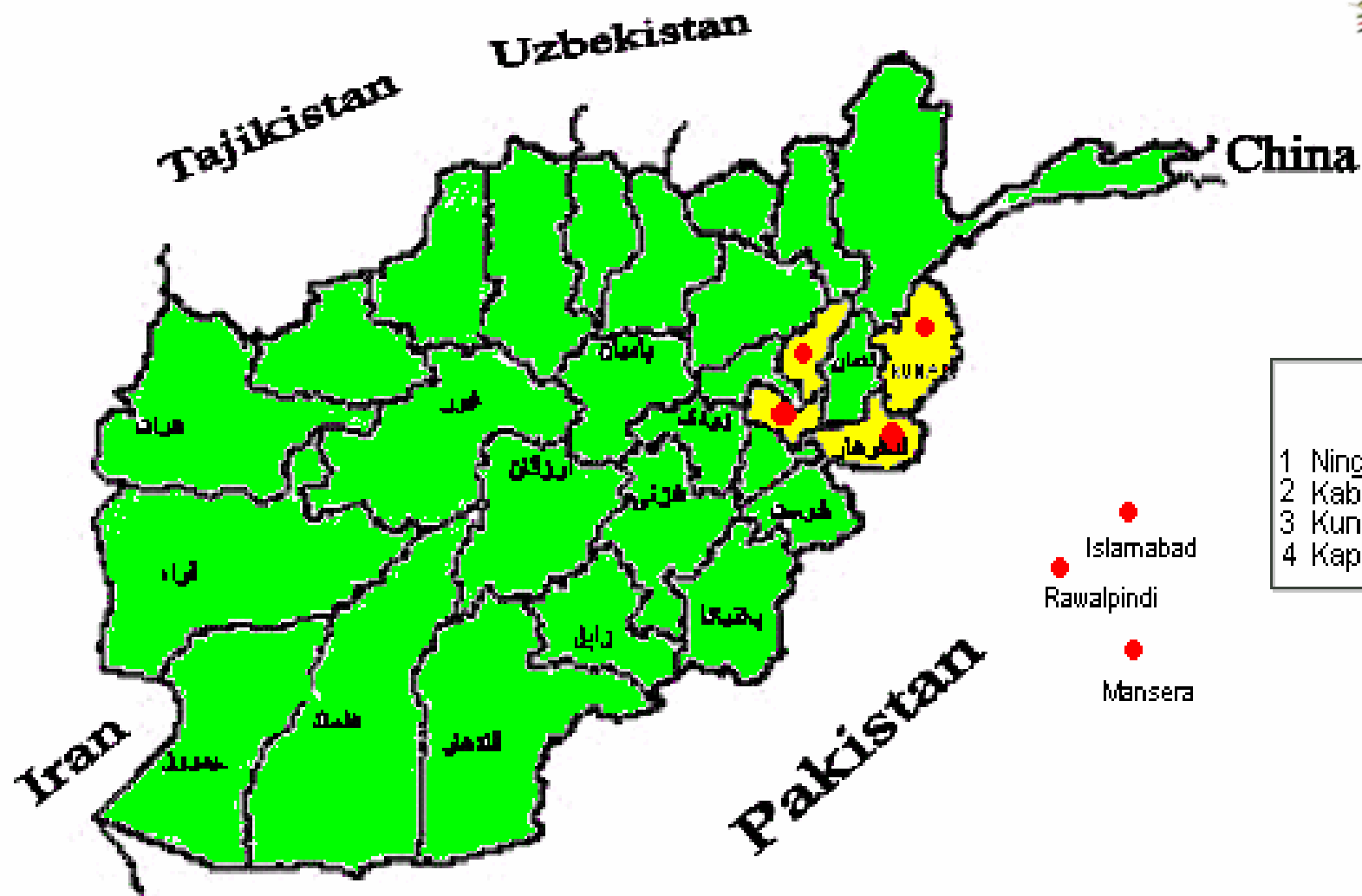
- HPAI out break started on 2nd March, 2006
 - H5N1 confirmed in 5 provinces Nan, Kabul, Parwan, Kapisa and Logar
 - H5 diagnosed in 4 provinces Laghman, Paktia Kunar and Wardak
 - 30856 birds culled
 - 7324 poultry yards and pens disinfected
 - \$74160 paid to poultry owners (compensation)
 - 2,00,000 HPAI (H5N2) vaccine injected
- 



1. دنگر مار
 2. لٹمان
 3. کتر
 4. بککبا
 5. کاکل
 6. لومگر
 7. دیمہ
 8. کاکوسا
 9. وروک

HPAI out breaks in 2007

- HPAI out breaks started in Nangarhar and Kunar on dated 18th January, 2007 (29/11/85)
- HPAI out breaks started in Kabul on 5th March, 2007 (14/12/85)
- Total province infected = 4 (Nan, Kab, Kap, Kun)
- Total samples tested = 390
- Total positive to H5N1 = 24
- Total positive to H5 = 35
- Total poultry culled = 12,302 head
- Disinfected poultry yards + pens = 3302
- Vaccinated birds = 240975
- Money paid **\$30446,32** = 1522316 Afs



ولایات آلوده به
انفلوانزا

- | | |
|--------------|------------|
| 1. Ningarhar | 1. ننگرهار |
| 2. Kabul | 2. کابل |
| 3. Kunar | 3. کنار |
| 4. Kapisa | 4. کاپيسا |

Islamabad
Rawalpindi

Mansera

ACTION PLAN

- Stop movement poultry within country especially infected area.
- Quarantine of live bird ,meat and egg importation from infected country.
- Designated some specific places for selling frozen chicken meat which imported from non infected countries.



ACTION PLAN

➤ **Response phase:**

= Personnel employed:

- Professional staff 192
- Worker 58
- Vehicle 29

ACTION PLAN

= **Method** (Followed guidelines of OIE,WHO and FAO)

- a. Through visited the held meeting with local Public Health, Municipality, police and shura for their cooperation during the response and surveillance activities in the fields.
- b. Prepare **provisional group** for (culling, disinfection and recording).
- c. Prepare of personal **protective equipment** and disinfection materials.

ACTION PLAN

- d. **Quarantine** of animal movement between the villages and provinces and any suspected died birds, stop movement of live birds and import chicken meat from border.
- e. **Compensation** (according to the government estimated prices)



ACTION PLAN

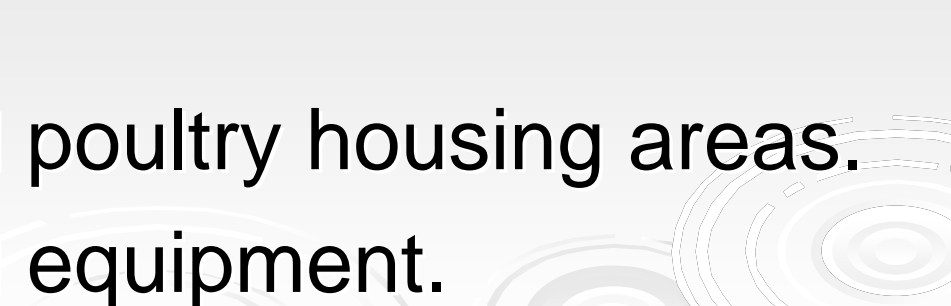
f. Depopulation and euthanasia :

- Euthanasia has carried out by veterinarians by helping of local laborers to catch birds and during disposal.
- Cervical disarticulation is used in the first time but some provinces have used chloroform.
- Disposal of carcasses have put on the plastic bags and carried by vehicle for buried in the well.

ACTION PLAN

- The well digging in 4meter deep in the far village area.
- Burial sites have protected from dogs or wild animals.
- Buried some disposable equipment.

g. Disinfection:

- We have used bleach as disinfected material.
 - Disinfected poultry housing areas.
 - Disinfected equipment.
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- Decorative water ripples are visible in the bottom right corner of the slide.

ACTION PLAN

h. Recording:

- Form for general information.
- Form for distribution of compensation



SUBSEQUENT OUTCOME

- From that date up to 28 of December 2006, under Sero Surveillance and monitoring program in all over the country especially in the (9) affected provinces through Government Veterinary Department and FAO staff,



SUBSEQUENT OUTCOME

- the following number of samples were collected and tested through ELISA Lab and the results were as follows:
 - a. Total sample collected 4328 samples
 - b. Total samples tested were 3813 ,,
 - c. Total positive to AI virus type -A. 1504 ,,

SUBSEQUENT OUTCOME:

- The number of 1504 cases positive to AI virus type-A were tested further to find out subtype of the virus especially sub type (H5N1). The results of several tests by ELISA lab showed (9) cases positive to subtype of (H9N2) and only one case for subtype (H7) the rest were negative for any other subtype.



SUBSEQUENT OUTCOME

- After 7 months of post outbreak there is no any sound of (HPAI) clinically and Lab confirmation. Technical committee were decided to remove the inter provincial quarantine and think about the neighbor countries border quarantine



SUBSEQUENT OUTCOME

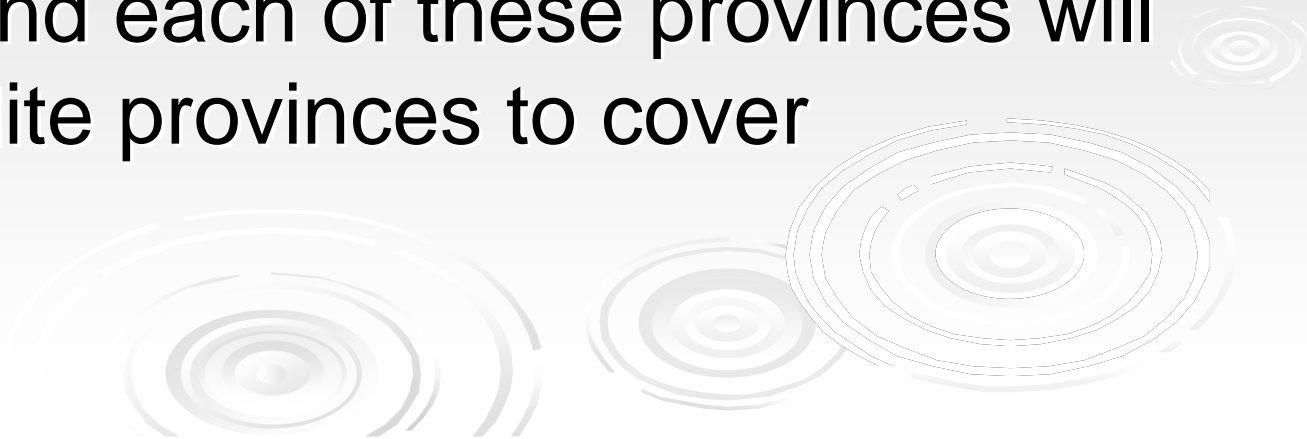
➤ **Emergency Response Team**

- This type of team is meant to provide a quick response to recurring Avian Influenza.



SUBSEQUENT OUTCOME

- This type of team is be established in eight regions all over Afghanistan. Of which five are already provided with needed materials like. Flu detect, swabs, boots, masks, cover all, disinfectants, sprayers. The ERT team for the following places is provided and each of these provinces will have satellite provinces to cover



SUBSEQUENT OUTCOME

- Proposed ERTs and satellite provinces

<u>No.</u>	<u>Province</u>	<u>Satellite provinces</u>	<u>Average distance in hr.</u>
			By car
1	Kunduz	Takhar,Badakhshan,Baghlan	5-10
2	Balkh	jawzjan, Samangan,Saripul,Faryab	3-8
3	Jalalabad	Laghman, Kunar, Nuristan	5-8
4	Hirat	Badghis, Farah, Nimroz	8-10
5	Kandahar	Zabul, Hilmand, Uruzgan, Dikundy	3-8
6	Parwan	Kapisa, Panjshir.	5-6
7	Paktya	Khost, Paktika,	5-7
8	Kabul	Logar, wardak, Ghazni	5-10
9	Bamyan	Ghor	

SUBSEQUENT OUTCOME

- One of the objectives of these regional centers is to eliminate the disease at first sight before being spread to other locations. Preferably at the very first entry point district.



Work flow of ERT

- Receive report/sample suspected for AI.
- Perform flu detect test.
- If positive, inform family that a second team will visit you tomorrow.
- Take the list of family members.
- Inform local hospital.
- Send sample to kabul for PCR
- If positive new chain of culling action will start

SUBSEQUENT OUTCOME

- If these personnel plus the professional personnel of NGOs are made to be vigilant and so as to make frequent visit to vulnerable site, the recurrence of HPAI will be stopped at first sight.



SUBSEQUENT OUTCOME

- If these centers are highlighted through possible means, the cooperation of common people may also be attracted to the program.



SUBSEQUENT OUTCOME

➤ Return migratory birds

At this time (Sept-Nov) the return of migratory birds is from North to south.

So far we have mortality reports among migratory birds. All were negative for HPAI.



SUBSEQUENT OUTCOME

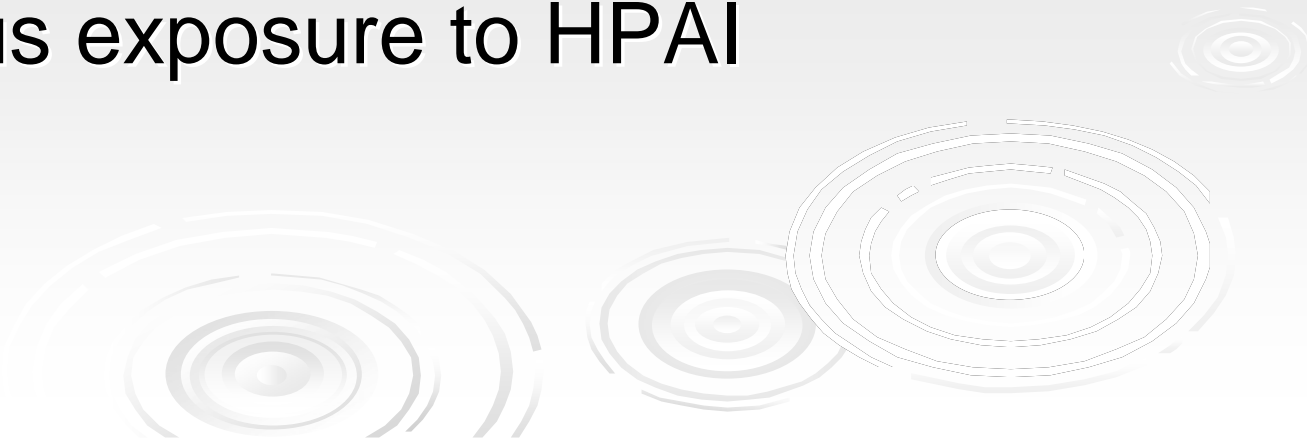
- In Afghanistan 32 out of 34 provincial agriculture director have Radio codan that we have installed for communication .





Constraints

- Security problem in some areas.
- Financial difficulty
- Lack of PPE for sometime.
- Euthanasia ,culture of inhabitants.
- No previous exposure to HPAI



- We have recently renovated our poultry diseases diagnostic Lab
- Now, We can offer our HPAI diagnostic services to those neighboring countries without these facilities .





Thank you

