



**AFRICAN UNION**

INTERAFRICAN BUREAU FOR ANIMAL RESOURCES (AU/IBAR)

SUPPORT PROGRAMME TO INTEGRATED NATIONAL ACTION PLANS FOR AVIAN AND HUMAN  
INFLUENZA (SPINAP)

**TECHNICAL WORKSHOP FOR SOUTHERN AFRICA**

2<sup>nd</sup> - 4<sup>th</sup> October 2008

GABORONE-BOTSWANA

## Contents

List of Acronyms and Abbreviations.....	3
Executive Summary .....	4
1. Round Table Introduction. ....	6
2. Welcome and Introduction. ....	7
3. Session one Strategies and Updates .....	8
2. Session Two- HPAI Epidemiology and Emergency Preparedness .....	10
3. Session Three Cross-border Coordination and Collaboration.....	13
4. Session Four Safe Poultry Production .....	15
5. Session five HPAI Emergency Response and Communication .....	18
6. Recommendations.....	20
7. Closing Ceremony:.....	21
Annex One Workshop Program.....	22
Annex Two List of Participants .....	26
Annex Three Workshop Presentation .....	<b>Error! Bookmark not defined.</b>

## List of Acronyms and Abbreviations

ACP	African Caribbean Pacific
ADB	African Development Bank
AED	Academy for Educational Development
AU/IBAR	African Union Interafrican Bureau for Animal Resources
CDC	Centre for Disease Control
EDRSAIA	Early Detection Reporting and Surveillance of Avian Influenza in Africa
ECTAD	Emergency Centre for Transboundry Animal Diseases Operations
EU	European Union
FAO	Food and Agriculture Organization
HIPPIE	Humanitarian Initiative to prepare for a pandemic Influenza Emergency
HPAI	Highly Pathogenic Avian Influenza
ILI	Influenza like Illness
INAP	Integrated National Action Plan
JTC	Joint Technical Committee
ND	Newcastle Disease
NICD	National Institute for Communicable Diseases
OIE	World Animal Health Organization
OVI	Onderstepoort Veterinary Institute
RRT	rapid response teams
RT-PCR	Reverse Transcriptase Polymerase Chain Reaction
SADC	Southern Africa Development Community
SARI	Severe and Acute Respiratory Infection
SOP	Standard Operating Procedure
SPINAP	Support Programme to Integrated National Action Plans
USAID	United State Agency for International Development
VS	Veterinary Service

## Executive Summary

SPINAP overall objective is to contribute to the reduction of the socio-economic impact of Avian Influenza and loss of human lives by assisting African Caribbean Pacific (ACP) countries to prepare against HPAI outbreaks, control the disease in poultry and human populations, and to prevent a possible human pandemic. The SPINAP's major thrust is to facilitate the implementation of INAPs and fill the budgetary and technical gaps. During the SPINAP Inception workshops organized in the three regions it was realized that there is a need for technical meetings where the different partners can share experience, information, plans and get updated on the recent development in HPAI epidemiology, diagnosis and surveillance and future planned events. SPINAP technical meeting for Southern Africa has taken place on the 2<sup>nd</sup> to 4<sup>th</sup> of October at Big Five Lodge in Gaborone; the main objectives of the meeting were:

- To highlight areas of importance in the control and prevention of HPAI and to discuss challenges that may affect level of preparedness and early detection.
- Harmonize way of thinking and methodology used to tackle technical issues; design, planning and implementation of SPINAP activities at country level.
- Equip the national coordinators with theoretical and technical knowledge necessary to ensure smooth implementation of SPINAP project
- Share information, experience, and knowledge and update each other about the current situation.

Twenty participants representing the Veterinary Service and the public health in Botswana, Lesotho, Swaziland, Mauritius, Madagascar, Mozambique, Malawi, Zambia and Namibia attended the meeting in addition to participation from SADC secretariat (both Agriculture and Health), OIE, USAID, FAO-ECTAD, Onderstepoort Veterinary Institute, WHO-Afro, and ILRI. Those who were not able to attend the meeting like CDC and AED had their contribution presented to the meeting.

The main focus of the meeting has been on HPAI epidemiology and emergency preparedness, cross-border coordination and collaboration, safe poultry production, strategies and updates and HPAI emergency response and communication.

# 1. Round Table Introduction.

The meeting started at 08:30 with the registration of delegates. The SPINAP coordinator chaired the opening ceremony and started by welcoming all the participants. This was followed by a round-table self introduction of all participants which consisted with the following: name and surname; Department, Position and responsibilities, and expectations from the workshop. The following countries and organization were represented

- Botswana
- Malawi
- Lesotho
- Mozambique
- Namibia
- Madagascar
- Zambia
- Zimbabwe
- Swaziland
- Mauritius
- AU Commission
- AU-IBAR
- FAO
- OIE
- SADC Secretariat
- WHO-Afro.
- ILRI.
- USAID.
- Onderstepoort Veterinary Institute (OVI).
- Ghana.

## 2. Welcome and Introduction.

The introduction was followed by a welcome address by Dr. Ahmed A. A. El Sawalhy, the Acting Director of AU-IBAR. He warmly welcomed all the participants in the workshop specially those who travelled to Gaborone. Dr Ahmed emphasized that this technical meeting is an integral part of the global fight against the AHI that AU/IBAR started with ADB project and continue through technical and financial support provided through SPINAP project. The meeting will ensure optimum use of SPINAP and allow the different beneficiary countries to come together to discuss technical issues.

He thanked the Government of Botswana and the Ministry of Agriculture, the Director of Veterinary Services, as well as the development partners, the EU, ACP secretariat and others for their sustained support.

After that remarks were given by Dr. Mtei from OIE sub-regional representation in Southern Africa; who emphasized on:

- The importance of good governance and improvement of the performance of the veterinary service in the course of the fight against HPAI.
- The importance of one health, collaboration between human and animal specialists and joint and concerted efforts between the different partners including WHO at regional level.
- Use the means, resources and capacity availed in the course of the fight against HPAI to address and tackle Newcastle disease and other poultry diseases.

Mr. Hulman from FANR-secretariat followed the OIE representative, after greeting the participants he highlighted the importance of SPINAP as a project coming to support implementation of the INAP, warned against complacency because the threat of HPAI is still there though the disease has never been reported in the region and urged the country to be prepared and vigilant. He mentioned that the set up of the SADC JTC is mainly to enhance the preparedness against HPAI, mobilize resources with support of developmental partners to implement regional activities and develop a regional policy frame work and strategies. He also added that a new project funded by ADB that aims at strengthen institutions involved in the fight against transbounday diseases including HPAI has been launched recently.

To conclude the opening session, Dr Moetapele Letshwenyo the director of the veterinary service in Botswana took the floor to wish all a warm welcome to Botswana.

He ensured the support of the government of Botswana to AU/IBAR efforts in the region and call for the participants to join effort, share experience and plans as an efficient way to harmonize thinking and methodology and to tackle areas of importance in prevention, control, surveillance and diagnosis of HPAI.

Finally, he wished the participants a pleasant stay and successful meeting and declared the meeting officially opened.

The agenda was then adopted and SPINAP coordinator introduced the objectives of the meeting which brings together specialist from both the public health and animal health from the different countries in the region in addition to the developmental partners to harmonize understanding and way of thinking, address cross-cutting issues between the countries such as cross-border harmonization, ensure common level of knowledge in the implementation of activities, lessons learned from various regions and countries and finally the inter-sectoral integration within the region and the countries.

### **3. Session one Strategies and Updates**

The first Session on the strategies and updates was chaired by **DR. DODJI TEGODE from AU-IBAR.**

The first presentation was given by Dr. ElZein Ali-SPINAP Regional Coordinator; it gave an overview of the progress achieved in SPINAP implementation since the Inception workshop. According to his presentation three contracts were sent out for signature (Botswana, Lesotho, Zambia), one of them (Zambia) has already signed the contract and the MOU, the project cycle, logical frame and cash flow were approved by three countries and the contracts are ready for signature (Zimbabwe, Swaziland, Madagascar) and two countries are in the final stage; the remaining four countries are awaiting the approval of the PSU.

The second presentation was given by Dr. Samuel Muriuki-SPINAP coordinator, it was on the need for an integrated global approach in the fight against HPAI. He gave a scientific background about the nature, distribution, reservoir, host and characters of HPAI virus, the history of the Influenza disease, the spatial distribution of HPAI outbreaks worldwide in both human and animals, the role of wild birds in the spread of the disease and their migratory routes and the role of trade, movement of live birds and biological materials and product in the spread of HPAI virus. He also talked about the risk associated with globalization and increasing movement of individuals

between countries and continents in view of the tendency of the new virus strain to evolve into a pandemic strain and the severe and wide impact that can have on production, trade, consumption pattern, livelihood and socio –economic effect in addition to the cost associated with mortality and morbidity incurred by HPAI. Therefore he emphasized on the integrated approach adopted by the international partners, translated into strategies, guidelines and regulation for which resources were mobilized in the different pledge conference in Vienna, Beijing, Bamako, etc. Then he explained the stand of AU/IBAR as regional body based on adapting those strategies to suit the continent situation. Finally, the presenter highlighted the challenges that may face the integral multi-sectoral approach at the regional and national levels; he identified funding gaps, poor coordination, and leadership conflict as possible impediment.

Dr. Sam was followed by Dr. Susanne Munstermann from FAO-ECTAD Southern Africa. She briefed the participants about FAO-ECTAD in the region; her presentation captured both ECTAD and SADC secretariat activities. Initially she gave an overview about structure of SADC with special emphasis on livestock institutions and their relationship with Regional Animal Health Centre. After that she summarized the activities supported by FAO at the regional level and at country level. At the regional level FAO funded SADC laboratory and Diagnostic subcommittee in 2007 and 2008, two meeting of SADC AI working group, one meeting for SADC Epidemiology and Informatics subcommittee and the meeting of SADC AI joint technical meeting in 2007. She showed the RAHC is assisting JTC to oversee implementation of activities that fall under four clusters (policy, communication, animal health and human health) identified in JTC meeting in 2007 and 2008. FAO sponsored two programmes at the regional level to strengthen diagnostic capacity of SADC laboratories and to improve surveillance capacity. At the national level FAO have got projects running in Malawi, Zambia, Mozambique and Zimbabwe.

From Q & A that followed, the followings were noted:

- Integrated rapid response with representation for both the animal and public health personnel should be developed. Materials for this team should be developed jointly by the different partners.
- CDC developed training materials and curriculum for a rapid response team; the training package is available and has been used in Namibia.

- Some are of the opinion that emphasis at this stage should be on a thematic approach, so all areas in the health sector should be addressed before bringing together the health specialists and veterinarians; so training is conducted for each thematic area e.g. laboratory because the Veterinarian are ahead in term of capacity and preparedness for HPAI.
- The different partners (FAO, USAID, AU/IBAR, CDC,..) should come together to put together the available training materials, harmonized them and identify the gaps.
- The criteria for selecting the four countries for funding in FAO/USAID project because of the high risk, poultry population, interest expressed by the countries, limited budget, previous engagement of the donors and FAO in those countries.
- The WHO training materials are of generic nature, they give guidelines that allow adaptation to specific countries and regions needs and vision of the training.

## **2. Session Two- HPAI Epidemiology and Emergency Preparedness**

This session was chaired by Dr. Eseko from WHO-AFRO.

Ms. Kimberly Crunckleton-USAID Regional Coordinator in Southern Africa gave an overview of USAID activities in the region. The presenter listed the challenges that face Avian Influenza programmes in the region; then she outlined the strategic approach adopted by USAID in the region, she presented a list of the activities to be carried under each of the four components of the strategic approach; namely preparedness and planning, surveillance and detection, response and communication. After she gave an overview about the USAID Humanitarian Initiative to prepare for a pandemic Influenza Emergency (HIPPIE) and presented a list of proposed activities and USAID partners under this initiative.

The next presentation was on risk mapping as a tool to target HPAI surveillance in Southern Africa was presented by Christine Jost. The presenter gave an introduction to risk mapping and discuss the risk mapping to target surveillance, the risk mapping in participatory epidemiology and risk mapping in the EDRSAIA project for Southern Africa. She defined risk mapping as a tool for presenting the spatial distribution of risk factors using GIS and other mapping tools, then she compared between conventional surveillance and risk based surveillance using risk mapping giving examples for both techniques. After that she introduced participatory epidemiology and explained the need for integrated surveillance activities to meet the characteristic of an effective system and

to achieve its technical objectives. Then she gave a list of the possible components of an integrated surveillance system. She also explained how participatory epidemiology can be combined with risk mapping to identify the risk factors for HPAI as planned in EDRSAIA project. At the end of her presentation she gave a list of EDRSAIA project in Southern Africa expected output particularly in the four countries covered by the project viz Malawi, Zambia, Mozambique and Zimbabwe.

The next presentation was surveillance in wild birds by Tom Nyanki of AU-IBAR; it gave background about the role of wild birds in the epidemiology of Avian Influenza and the strain of H5N1 that emerged in 1996. He reviewed hypotheses about the possible role of waterfowl and long distant migrants wild birds in the spread of the current strain of H5N1. After that he listed possible objectives for surveillance in wild birds and summarize the finding of a survey conducted recently in Europe; given the established prevalence in a number wild birds families and species. He discussed the different strategies and possible approach that can be employed in wild bird surveillance system. Then he listed some waterfowls that migrate to Africa and their flyways and he talked about the activities conducted in Southern Africa. Finally, he listed the main constraints and gaps in wild birds' survey in the region.

#### CDC ACTIVITIES ON AI

The presentation was on the AI activities planned and implemented by CDC in the SADC region:2007-2009. It was given by Ms. Crunckleton USAID regional coordinator on behalf of Dr. Stefano Tempia of the CDC. According to the presentation CDC operates in three areas namely; capacity building for rapid response, capacity building for diagnosis of Avian Influenza and surveillance system for SARI and Influenza like diseases. In the first area CDC organized a regional training for twelve countries on rapid response in collaboration with NICD and trained human and animal professionals in DRC, Angola, Namibia, South Africa, Tanzania and planning to conduct one more training in Madagascar. In the laboratory diagnosis CDC provided reagents and consumables, external quality assurance and primers to NICD, in addition to capacity building on RT-PCR and support towards accreditation of NICD by WHO. Regarding surveillance for SARI and ILI the CDC emphasises on capacity building of SADC countries in sentinel surveillance in both epidemiological and virological surveillance.

From the discussion that followed the points below were noted:

- There is a need for surveillance guidelines on sector 3 and sector 4 of poultry production. TOR for a consultant to develop a surveillance system and guidelines in the region has been developed and the consultancy may be launched in November.
- Guidelines for harmonization of data collection forms have been developed.
- Harmonization of SOPs for laboratory diagnosis has been started and a decision by SADC sub-committee for diagnosis has been made that at least countries should have the capacity to carry HI test.
- HIPPIE is focusing on preparedness for HPAI pandemic phase and does not address directly issues related to international health regulation. USAID provided fund and support to WHO at the global level.

The second day started with a recap of day one by Dr maccaya. This was followed by the presentation of Dr Marco Romito On HPAI diagnostic capacity, procedures and gaps including links between SADC and global networks. The paper highlighted the history of AI occurrence in South Africa, the capacity of OVI for AI diagnosis, the OVI AI activities and the need for pathogenecity testing. The paper concluded with the issue of proficiency testing involving 2 local laboratories, 2 international laboratories and the twinning with VLA. The process of becoming an OIE reference lab is on and expected to be complete by 2012.

The discussions centred mainly on airline sample transportation with the possibility of FAO providing packaging and the need to use recognised couriers: i.e. DHL & World courier.

## 2. Simulation Exercises-The Zambian Case.Dr Wamuwi

The paper highlighted the participation of all stakeholders (national task force, technical team, communication personnel, NGOs and National poultry association). The scenario of an outbreak was given with progressive scenes. The exercise was an opportunity to identify gaps in the response plan. Those gaps are being addressed currently. The paper concluded that the simulation exercise is an important tool in testing national response plan for action but there is need to properly manage the information at the planning and implementation stages in order not to raise alarm in the country as well as in neighbouring countries.

### **3. Session Three Cross-border Coordination and Collaboration**

Session Three- Cross-Border Coordination and Collaboration was Chaired by Dr. Moetapele Letshwenyo DVS of Botswana-

This session started with a presentation by Dr Baboucarr Jaw on the importance of regional networks in the control of TADs. The paper highlighted the fact that disease transmission occurs irrespective of decreed national boundaries. The presence of disease and the ability to eradicate disease in a country is greatly influenced by the sanitary status of its neighboring countries. This suggests that collaborative actions beyond its boundaries are absolutely `essential.

The presenter went on the highlight the opportunities that could be brought about by regional networks as follows:

Regional networking is an opportunity to enhance the capacity of national veterinary services in an era of dwindling state support

Regional networking facilitates policy dialogue and planning in the livestock and wildlife sectors thereby preventing conflicts within the transboundary conservation areas

Regional networking enhances negotiating capacity in standard setting fora

The paper also highlighted the need for governments to invest more in veterinary services and address the issues of:

- Technical capability

- Retention of human capital

- Promotion of private sector participation

## Access to markets

The need for a reliable surveillance system was also highlighted with a particular emphasis on the need to enhance information management through regular reporting.

The paper concluded with monthly disease reports inventories for southern African countries from 2005-2007

The discussions centred on the following:

Explore the possibility of RAHC to be hubs for reports for onward submission to AU-IBAR Directors of VS to ensure that reports are being sent timely to international organisations and in country feedback is given to field staff.

The session ended with the formation of 3 groups to dilate on the following topics:

Immediate Capacity Building Needs in HPAI Epidemiology and Diagnostics (SPINAP to fund)

How to improve cross border cooperation and information sharing on HPAI and other TADS

How to improve collaboration between AU/IBAR and other HPAI initiatives at regional and national levels

The Group presentations are summarised below:

Group1: Immediate Capacity Building Needs in HPAI Epidemiology and Diagnostics (SPINAP to fund)

- Expertise-Wildlife epidemiological skills and surveillance
- Facilitate adequate vaccination of Newcastle disease to unmask emergence of HPAI
- Fund simulation exercises

- Cascade training costs
- Regional training for epidemiologists
- Capacity building in risk mapping
- Networking and experience sharing

Group 2: How to improve cross border cooperation and information sharing on HPAI and other TADS

- Border liaison committees
- Harmonization of zoosanitary and phytosanitary regulations in neighboring countries
- Establish contacts- Directors of the relevant sectors in the neighboring countries should have hotlines to communicate with each other

Group 3: How to improve collaboration between AU/IBAR and other HPAI initiatives at regional and national levels

- SADC could spearhead partnerships with AI platform and AU-IBAR
- Health desk of AU to be engaged in AI activities.
- Need for collaboration between organisations funding HPAI activities to come up with joint assessments for output and outcome evaluations.

## **4. Session Four Safe Poultry Production**

Session 4- Safe Poultry Production was Chaired by Dr. K. Crunckleton-USAID Regional Coordinator

The session started with a presentation by Dr Baboucarr Jaw on poultry production systems and biosecurity. The topic was introduced with a classification of production systems according to FAO into sectors 1 to 4 with a predominance of sectors 3 and 4 in southern Africa based on an analysis of country SPINAP documents. The paper went on to give a definition on biosecurity with its 2 elements (bio-exclusion and bio-containment). The risks factors were highlighted and the

biosecurity measures at national level, commercial farm level, backyard level and live bird markets elaborated on.

Discussions centred on the strengths and weaknesses of applying biosecurity measures within the context of African live bird markets.

The session ended with the formation of 3 groups to reflect on how can poultry producers especially in sectors 3 & 4 be encouraged to improve bio-security and husbandry practices as a strategy against HPAI. The summary of the presentations is as follows

#### GROUP1

##### SECTOR 3

- Provision of proper housing

Movement control of people, equipment, poultry products, wild birds, rodents and other animals

- All-in all-out

- Clear definition of clean and dirty areas

- Regular monitoring of poultry houses

- Proper disposal of dead birds and waste (burning or burial)

- Provision of clean water and feeds

- Regular cleaning and disinfecting

  - Reward compliers and punish violators viz-a-vis compensation

- Train poultry farmers on biosecurity measures

- Utilise compliers as resource persons during biosecurity training

##### SECTOR 4

- Capacity building of producers on bio-exclusion

- Capacity on early recognition and immediate reporting

- Proper disposal of dead birds

- Regular vaccination against ND

- Capacity building on improved housing

#### GROUP2

Production

- Observe the right densities

Train Educate the targeted groups in the sector (women, children) on improved husbandry and health.

Promote vaccination against newcastle disease

Transportation

Targetted training on recommended animal welfare standards during transportation, including distance to nearest market, appropriate technology carrying devices etc

Separate species and ages when transporting to market

Don't transport sick chicken to the market

Marketing

Organized and disciplined marketing system- infrastructure, regulation,

Information on numbers and source of chicken

Sanitary inspection and disease surveillance in the market

Sensitization-e.g Put information posters to warn/advise people not to take live chicken at home

Removal of stray chickens from the market place

Processing

Adhere to the right hyeginic standards in processing

GROUP 3

Confinement

- Enclosure with poultry fence around
- Foot bath at entry
- Separate from humans-don't share accommodation with birds
- Understand socio-cultural issues and build biosecurity measures around that

Community Education

- Separate Domestic from wild
- Hygiene and self protection
- Rules for introduction of new birds
- On farm quarantine to separate new and old birds
- Avoid Visitors interacting with your birds
- Avoid visiting and touching other people's birds
- Enclosed markets
- Records-Movement permit

- Surveillance mechanism
- Training of market people
- Protective clothing-requirement especially the butchers
- Training butchers
- Provision of basic sanitary facilities
- Procedures and guidelines e.g. by laws

## **5. Session five HPAI Emergency Response and Communication**

This session was chaired by Dr. Susanne Munstermann.

The meeting started with recap of day two, it was presented by Dr. Fusya Goma Zambia National Coordinator who summarized the main points in day one presentation, the question raised and discussion that followed.

The title of the second presentation in the third day was from HPAI preparedness to outbreak management-the experience of Ghana, it was given by Dr. Joseph Adong Awuni from Ghana. The presenter gave a brief introduction about the epidemiology of Avian Influenza from 1959-2003 and the situation of HPAI in Africa. After that he listed the factors underlining the high risk of introducing the disease into Ghana; he identified the presence of the disease in neighbouring countries, the wetlands, migratory birds flyways and the poultry production as the main risk factors. Then he gave an overview of the preparatory steps taken to prevent the introduction of the disease into the country and to enable early detection. From the experience of Ghana it was realized that awareness should always start with the media and passive surveillance is not enough alone and should be combined with active surveillance. After that he explained the necessary steps and procedure for mounting an active surveillance system, the technique of samples collection and transportation, samples processing and available diagnostic tests in addition to the outcome of the surveillance activities in Ghana. In the second part of his presentation he gave an overview of the Ghana experience with HPAI; the detection of the disease, diagnosis and the measures taken control the disease.

The next presentation was given by the representative of WHO-AFRO Dr. Nicholas Eseko, the title of the presentation was HPAI outbreak management and control alternatives and their application in human population. The presentation main focus was on the epidemiology and background,

types of interventions, non pharmaceutical interventions and its implementation, pharmaceutical interventions, containment strategy, legal authorities and ethical framework. The presenter started the situation of HPAI worldwide and in Africa in and the recent statistics issued by WHO. Then he discussed the different phase of the pandemic as identified by WHO and the conditions required for the pandemic. After that he gave a case definition for HPAI suspect and patient, samples to be collected measures to be taken, available treatment options and protocol. He also discussed in details the non pharmaceutical intervention with emphasis on quarantine, isolation, social distancing, closure of school, business and market restriction, cancellation of public gathering and infection control and finally the steps for containment and the implementation of the NPI. He also looked into the ethical and legal issues associated with implementation of NPI measures and the role of the different partners (government, NGOs, communities,..) in its implementation.

This presentation was given by Dr. Samuel Muriuki, it was about the management options for HPAI in poultry population. The presenter gave a brief introduction about the disease, its causative agent, epidemiology, the disease manifestation and clinical signs, poultry diseases with similar clinical manifestation and the current situation of the disease. Then he discussed the principles of HPAI outbreaks management, the strategies and tactics to be employed in prevention, control and eradication. He emphasized on early detection as an effective means for successful containment of HPAI outbreak and highlighted the importance of quarantine, hygiene and education. He tackled vaccination and stamping as possible pathways for eradication of HPAI.

The next presentation was on cross border programme of AI.com-Southern Africa. Five countries were identified as high risk countries in the region by the presenter; they are Malawi, Zambia, Mozambique, Tanzania and DRC. The objectives of AI.COM program given during the presentation include technical assistance pre-outbreak, during the outbreak and post the outbreak, reduce exposure risk in key cross-border areas, capacity building for awareness and prevention and long term behaviour changing. The primary targets of the program are farmers in sector three and four while the secondary audience can be health and animal officials, consumers, civil society and media. The program is operating in Zambia, Malawi, Mozambique and South Africa. The main constraints that face implementation of such a program are absence of the disease from the region, task force fatigue and competition with other diseases like Malaria, TB etc.

## 6. Recommendations

1. Strengthening collaboration between human and animal health professionals on zoonotic diseases within the National Task Force need to be operationalized
2. Countries should submit relevant information with regard to SPINAP in order to speed up the approval for implementation
3. By end of October 2008 all SPINAP project countries should have signed up their agreements with AU-IBAR to facilitate timely project implementation:
4. All SADC countries are encouraged to carry out simulation exercises Desk top at country level and/or field simulation as appropriate
5. There is need to harmonize technical content in training materials for both animal and human health for utilization by rapid response teams (RRT):
6. SPINAP need to contribute to the building of regional and country level capacity in wild bird surveillance:
7. Member states should develop operational communication strategies for all phases of disease prevention and response:
8. SADC secretariat should develop guidelines for compensation of farmers.
9. Countries should strengthen training of field veterinarians and farmers in disease early detection and immediate reporting:
10. Strengthen national laboratory capacity to carry out initial diagnosis through technical capacity building and material provision.
11. SPINAP to assist countries to carry out mass vaccinations against ND to allow easy recognition of HPAI in the event of an outbreak
12. Countries should send monthly disease reports to AU-IBAR using the LIMS standard format, whilst AU-IBAR should send monthly feedback reports to countries: Action: National CVO/Directors and AU-AIBAR.

13. Countries to establish/strengthen human sentinel surveillance system of Severe Acute Respiratory Infections (SARI) as a means of improving differential diagnosis of Avian Influenza

## **7. Closing Ceremony:**

In conclusion Dr Sam Muriuki thanked all delegates for their presence and mostly their active participation. Dr. Benchimera-SPINAP Malawi national coordinator pronounced the vote of thanks on behalf of the participants, followed by remark from Dr. Mtei OIE sub-regional representative and Dr.Ahmed ElSawalhy-AU/IBAR acting director. On behalf of the government of Botswana Dr. Moetapele Letshwenyo concluded the meeting thanking the participants and AU/IBAR and declared the meeting was officially closed.

## Annex One Workshop Program

### AGENDA FOR SPINAP TECHNICAL WORKSHOP FOR SOUTHERN AFRICA

2<sup>nd</sup> – 4<sup>th</sup> October, 2008 GABORONE-BOTSWANA

TIME	TOPICS	PRESENTER/ RESPONSIBLE
Day 1		
08:30– 09:00	Opening session	
	SESSION CHAIR: DR. S. MURIUKI	
09:00 – 10.00	Welcoming Remarks	Director, AU/IBAR
	SADC representative	Mr. Hulman
	Official Opening Address	Representative of Min. of Agriculture
10:00 – 10:15	ADOPTION OF PROGRAM , INTRODUCTIONS OF PARTICIPANTS AND EXPECTATIONS AND WORKSHOP OBJECTIVES	Dr. S. Muriuki, PC
10:15 – 10.45	HEALTH & REFRESHMENTS BREAK	ALL
	SESSION 1: STRATEGIES AND UPDATES – CHAIR: DR. DODJI TEGODE, AU-IBAR	
10.45 – 11.30	PROGRESS OF SPINAP-AHI implementation IN THE SOUTHERN AFRICA REGION	Dr. ElZein Ali, RC
11.30 – 12.00	WHY INTEGRATED APPROACH IN THE FIGHT AGAINST HPAI: AN EXPOSIE TO THE GLOBAL HPAI STRATEGIES	Dr. S. Muriuki
12.00 – 12.30	UPDATE ON SADC HPAI ACTIVITIES	Mr. Hulman
12.30– 13.00	FAO/ECTAD HPAI ACTIVITIES IN SOUTHERN AFRICA	dR. susanne Munsterman Dr
13.00–14:00	LUNCH BREAK	ALL

Session 2A – HPAI Epidemiology and Emergency Preparedness

SESSION CHAIR: Dr. B. Mtel OIE

	USAID HPAI ACTIVITIES IN SOUTHERN AFRICA	Dr. Crunckleton
14.00-14.45	RISK TARGETED ACTIVE SURVEILLANCE AS AN ESSENTIAL COMPONENT OF VETERINARY SERVICES IN SOUTHERN AFRICA	Dr. christine jost
14.45-15.15	AI SURVEILLANCE IN WILD BIRDS IN SOUTHERN AFRICA	Dr. TOM NYARIKI
15.15-15.45	HPAI surveillance and early detection	Dr. Stephano Tempia (CDC)
16.15-16.45	PLENARY DISCUSSION & REACTIONS	ALL
16.45– 17.00	HEALTH& REFRESHMENTS BREAK	ALL
17.15-17.45	Discussions	
	DAY 2: session 2b - HPAI Epidemiology and Emergency Preparedness	
	CHAIR: STEPHANO, CDC	
08.30 – 09.00	Recap of Day 1	spinap NPC Zimbabwe
9.00-9.30	HPAI DIAGNOSTIC CAPACITY, NETWORKS, PROCEDURES AND GAPS, INCLUDING LINKS BETWEEN SADC AND GLOBAL NETWORKS	Dr.MARCO ROMITO
9.30-10.00	HPAI EPIDEMIOLOGIC AND DIAGNOSTIC NETWORKS IN THE SADC REGION	Dr. susanne MUNSTERMANN
10.00-10.30	Plenary discussion	
10.30-11.00	HEALTH BREAK AND REFRESHMENTS	ALL
	SESSION 4: CROSS-BORDER COORDINATION AND COLLABORATION	
	CHAIR – DVS Botswana	
11.00-11.30	The importance of Regional networks for HPAI and other TBDs surveillance & INFORMATION SHARING: the role of au-ibar	Dr. Baboucarr.Jaw
11.30-13.00	Group DiscussionS Immediate Capacity Building Needs In HPAI Epidemiology And Diagnosis (Epidemio-Surveillance Including Simulations)	S. MURIUKI

	How to Improve cROSS BORDER COOPERATION AND INFORMATION SHARING ON HPAI & OTHER TBDS HOW TO IMPROVE COLLABORATION BETWEEN SPINAP AND OTHER HPAI INITIATIVES AT REGIONAL & NATIONAL LEVELS USE OF SIMULATION EXERCISES AS TOOLS FOR EMERGENCY PREPADENESS AGAINST HPAI – The practice, design and execution of SEs: Experience from SEA.	
	LUNCH BREAK	ALL
13.00-14.00	SESSION 5: Safe Poultry Production - Session Chair – POULTRY ASSOCIATION	
14.00-14.30	POULTRY PRODUCTION SYSTEMS AND BISOSECURITY - LESSONS LEARNED AND STEPS TO STEM HPAI RISK	dr. baboucarr jaw
14.30-15.00	Poultry diseases and diagnosis in Southern Africa	Poultry Expert-University of Pretoria
15.00-16.00	Group Work How can poultry producers, especially in sector 3&4 be encouraged to improve Bio-security and Husbandry Practices as a strategy against HPAi?	dr.baboucarr jaw
16.00 -16.30	HEALTH BREAK AND REFRESHMENTS	ALL
16.30 – 17.45	GROUP WORK PRESENTAIONS	ALL
	DAY 3: SESSION 6: HPAI Emergency response AND Communication CHAIR: SUZZANE, FAO	
08.30 – 08.45	Recap of Day 2	NPC – Zambia
8.45- 10.15	FROM HPAI PREPAREDNESS TO OUTBREAK MANAGEMENT - EXPEIREINCE FROM GHANA	Dr.J. AGUNI
10.15-10.35	HEALTH BREAK AND REFRESHMENTS	ALL
10.35-11.05	HPAI MANAGEMENT AND ALTERNATIVES IN HUMAN POPULATIONS	WHO AFRO
11.05-11.40	HPAI OUTBREAK MANAGEMENT AND CONTROL	Dr. S. Muriuki

	ALTERNATIVES IN POULTRY POPULATIONS	
11.40-12.20	PLENARY DISCUSSION	ALL
12.20-13.00	HPAI COMMUNICATION: WHAT AND HOW TO COMMUNICATE AT DIFFERENT STAGES OF THE EPIDEMIC (i.e. pre, during and after the epidemic).	Dr. Crunckleton, AED/USAID
13.00-14.00	LUNCH BREAK	ALL
14.00-15.30	GROUP WORK: STRATEGIES TO IMPROVE HPAI COMMUNICATION AT NATIONAL AND REGIONAL LEVELS	AED – Facilitator
15.30-16.00	HEALTH BREAK AND REFRESHMENTS	ALL
16.00-17.00	RECOMMENDATIONS	NPC Lesotho
	CLOSING CEREMONY	SESSION CHAIR
	VOTE OF THANKS - MALAWI	
	CLOSING REMARKS – EC	
	CLOSING REMARKS IBAR	
	OFFICIAL CLOSING SPEECH – BOTSWANA	

## Annex Two List of Participants

### **BOTSWANA**

Dr. Moetapele LETSHWENYO  
Director of Veterinary Services  
Ministry of Agriculture  
Private Bag 32  
Gaborone  
Botswana  
Tel: + 267 39 50 635  
Fax: +267 390 3744  
Email: [mletshwenyo@gov.bw](mailto:mletshwenyo@gov.bw);  
[msletshwenyo@yahoo.com](mailto:msletshwenyo@yahoo.com)

### **GHANA**

Dr. Joseph Adongo AWUNI  
Principal Veterinary Officer  
Ministry of Food & Agriculture  
P. O. Box M 161  
Accra, Ghana  
Tel: +233 (0)20 8116397  
Email: [josephawuni@hotmail.com](mailto:josephawuni@hotmail.com)

### **LESOTHO**

Dr. Marosi MOLOMO  
Director of Livestock Services  
Department of Livestock Services  
Ministry of Agriculture & Food Security  
P/B A82  
**MASERU 100**, Lesotho  
Tel: +266 22324843/22312318  
Fax: +266 2231 1500  
Email: [marosi\\_molomo@yahoo.com](mailto:marosi_molomo@yahoo.com)

Dr. Lugemba BUDIAKI

Director Primary Health Care  
Ministry of Health and Social Welfare  
P.O. Box 514 Maseru 100  
MASERU, Lesoth  
Tel: +266 2222 6000  
Fax: + 266 22 311 500

### **MADAGASCAR**

Dr. Lisette RAVOLOLOMANANA  
Point Focal Grippe Aviare  
Direction des Urgences et des Maladies  
Ministère de la Sante et du Planning Familial  
Institut d'Hygiene Sociale  
Analakely - Antananarivo (101)  
MADAGASCAR  
Tel : +261 32 40 01 031  
Email : [lissetravololo@yahoo.fr](mailto:lissetravololo@yahoo.fr)

Dr. France Feherarison RANAIVOSOLOFO  
Assistant National Coordinator  
Direction of Veterinary Services  
Ministry Agriculture, Livestock and Fisheries  
Nanisana, Lot II A 128  
110 ANTANANARIVO  
tel : +261 33 12 217 60 ; +261 32 42 908 52  
Email : [ranaivosolofo\\_france@yahoo.fr](mailto:ranaivosolofo_france@yahoo.fr)  
[feherarison@gmail.com](mailto:feherarison@gmail.com)

### **MALAWI**

DR. Bernard Armon CHIMERA  
Deputy Director  
National Avian Influenza Coordinator  
Department of Animal Health  
And Livestock Development

Agriculture and Food Security  
P.O. Box 2096  
**LILONGWE**, Malawi  
Tel: +265 1753036, +265 9315766  
Fax: +265 1 751349  
Email: [benchimera@sdpn.org.mw](mailto:benchimera@sdpn.org.mw)  
[Agric-dahi@sdpn.org.mw](mailto:Agric-dahi@sdpn.org.mw)

#### **MAURITIUS**

Dr. Anupam Kumar Srivastava  
Officer incharge, Animal Health Laboratory  
Division of Veterinary Services, REDUIT  
Ministry of Agro-industry, Food Safety and Security  
C/O Animal Health Laboratory, Division of Veterinary  
Services  
Mauritius  
Tel : +230 9127262  
Fax : +230 4642210  
Email : [ak\\_shriv@yahoo.co.in](mailto:ak_shriv@yahoo.co.in)

#### **MOZAMBIQUE**

Dr. Fernando RODRIGUES

#### **SOUTH AFRICA**

Dr. Marco ROMITO  
Senior Research Veterinarian  
Molecular Epidemiology and Diagnostics  
Onderstepoort Veterinary Institute  
PO Box 12495, Onderstepoort 0110  
Onderstepoort, South Afric  
Tel: +27-12-529-9252  
Fax: +27-12-529-9249  
Email: [RomitoM@arc.agric.za](mailto:RomitoM@arc.agric.za)

#### **SWAZILAND**

Dr. Roland Xolani DLAMINI  
Acting Director of Veterinary and Livestock Services  
Ministry of Agriculture and Cooperatives  
P.O. Box 162, MBABANE, SWAZILAND

Head of Veterinary Public Health Division  
Department of National Director of Veterinary Services  
Ministry of Agriculture  
P.O. Box 1406  
Praça dos Heróis Moçambicanos  
Mozambique  
Tel: +258 8248 25640  
Fax: +258 21 460479  
Email: [f3rodrigues1@yahoo.co.uk](mailto:f3rodrigues1@yahoo.co.uk)

#### **NAMIBIA**

Dr Alec Simukai BISHI  
Veterinary Epidemiologist  
Directorate of Veterinary Services  
Ministry of Agriculture Water and Forestry  
P. Bag 12022  
Windhoek  
Namibia  
Tel +264-61-2087504, +264 61 2087512  
Fax +264-61-2087779  
Email: [bishia@mawf.gov.na](mailto:bishia@mawf.gov.na)

Telephone: +268-4042731/6  
+268-6087734  
Fax: +268-4049802  
+268-4046948  
E-mail: [dlaminirol@gov.sz](mailto:dlaminirol@gov.sz)

Mr. Patrick DLAMINI  
Environment Health Officer  
Ministry of Health & Social Welfare  
P.O. Box 473,  
Mhlangano, Swaziland  
Tel: +268 2078892, +268 6322147  
Email: [pbdlamini@yahoo.co.uk](mailto:pbdlamini@yahoo.co.uk)

#### **ZAMBIA**

Dr. Fusya Yvonne GOMA  
Department of Veterinary and Livestock Development

Ministry of Agriculture and Cooperatives

P.O.BOX 50060

Telephone: 00260 122 94 70

00260 977 43 84 98

Fax: 00260 1 22 94 70

Email: [F\\_goma@yahoo.com](mailto:F_goma@yahoo.com)

[fgoma@naleicdvld.gov.zm](mailto:fgoma@naleicdvld.gov.zm)

Dr Edgar Muyunda WAMUWI

Disease Control

Department of Public Health

Ministry of Health, Ndeke House

P.O. Box 30205

Lusaka

Zambia

Tel : +260 9742949

Email : [wamuwie@yahoo.com](mailto:wamuwie@yahoo.com)

## **ZIMBABWE**

Dr. Vengesai Pious MAKAYA

Deputy Director

Veterinary Technical Services

Central Veterinary Laboratory, Box CY 551, Causeway,

Harare, Zimbabwe

Tel: +263-4-705885, +26311608337

Fax: +263-4-707952

E-mail: [vetlabs@africaonline.co.zw](mailto:vetlabs@africaonline.co.zw)

[piousv@hotmail.com](mailto:piousv@hotmail.com)

Dr. Stanley Munyaradzi MIDZI

Division of Preventive Series

Department of Disease Prevention & control

Ministry of Health and Child Welfare

P.O. Box CY1122

Causeway, Harare,

Zimbabwe

Tel : +263 4 729032

Fax : +263 4 793634

Email : [smmidzi@yahoo.co.uk](mailto:smmidzi@yahoo.co.uk)

## **ILRI**

Christine C. JOST

Scientist

P. O. Box 30709, 00100

Nairobi, Kenya

Tel: +254 20 4223000

Email: [c.jost@cgiar.org](mailto:c.jost@cgiar.org)

## **OIE**

Dr. Patrick Bastiaensen

Programme Officer

OIE

Sub-Regional Representation

P.O. Box 25662

Gaborone

Botswana

Tel: +267 391 44 24

Fax: +267 391 44 17

Email: [p.bastiaensen@oie.int](mailto:p.bastiaensen@oie.int)

Dr. Bonaventure Mtei

OIE Sub Regional Representative

P.O. Box 25662

Gaborone, BOTSWANA

Tel: 267 391 4424

Fax: +267 3914417

Email: [b.mtei@oie.int](mailto:b.mtei@oie.int)

## **SADC**

Joseph

MTHETWA

Senior Programme Manager for Health and  
Pharmaceuticals

Southern African Development Community (SADC)

Secretariat  
Kgale View Offices, Plot 116  
Private bag 0095  
Gaborone  
Botswana  
Tel: (+267)395 1863 Extension 5083 (Office)  
(+267) 3164485 (Home)  
Cell: (+267) 71720972  
Email: [jmthetwa@sadc.int](mailto:jmthetwa@sadc.int)  
[josephmthetwa@yahoo.co.uk](mailto:josephmthetwa@yahoo.co.uk)

Dr. Hulman BEEDEEANAN  
Senior Programme Manager  
Department of Livestock  
SADC Secretariat  
Private Bag 0095  
Gaborone, Botswana  
Tel: +267 395 1863 Ext 5090  
Fax: +267 395 1821  
Email: [bhulman@sadc.int](mailto:bhulman@sadc.int)

## Dr. Misheck MULUMBA

Project Coordinator  
AfDB SADC TADS Project  
SADC Secretariat  
Private Bag 0095  
Gaborone  
Tel: +267 3951863  
Email: [misheckmulumba@yahoo.co.uk](mailto:misheckmulumba@yahoo.co.uk)

## USAID

Ms. Kimberly CRUNKLETON  
USAID Southern Africa Regional Avian Influenza  
Coordinator  
United States Agency for International Development  
USAID Southern Africa  
100 Totius Street

P.O. Box 43  
Groenkloof 0027  
Pretoria, South Africa  
Tel: +27 12 452 2247  
Fax: +27 12 460 3177  
E-mail: [kcrunkleton@usaid.gov](mailto:kcrunkleton@usaid.gov)

## US EMBASSY

Anthony C. WOODS  
Regional Environment and Health officer for Southern  
Africa  
P.O. Box 90  
Gaborone  
BOTSWANA  
Tel: +267 395 3982 ext 5257  
Fax: +267 395 6947/6504  
Cell: +267 71 754 535  
Email: [woodsac@state.gov](mailto:woodsac@state.gov)

## WHO

Dr. Nicholas ESEKO  
Inter Country Epidemiologist  
IST/CDS-EPR World Health Organisation  
82 Enterprise/Glenara Avenue  
P.O. Box BE 773, Belvedere  
Highlands, Harare, Zimbabwe  
15 Cheryl Road, Avondale  
Zimbabwe  
Tel: +263 23255942 Fax: +263 4 746127  
Email: [esekoN@zw.afro.who.int](mailto:esekoN@zw.afro.who.int)

## AU/IBAR

Dr. Ahmed ELSAWALHY  
Ag. Director/Head of Mission  
African Union/IBAR  
P. O. Box 30786, 00100  
Nairobi, Kenya  
Tel: +254 02 3674000  
Email: [ahmed.elsawalhy@au-ibar.org](mailto:ahmed.elsawalhy@au-ibar.org)

Dr. Thomas Manyibe NYARIKI

Wildlife Expert

African Union/IBAR

P. O. Box 30786, 00100

Nairobi, Kenya

Tel: +254 02 3674000

Email: [tom.nyariki@au-ibar.org](mailto:tom.nyariki@au-ibar.org)

Dr. Baboucarr JAW

Regional Coordinator for Southern Africa

P.O. BOX 25662

Gaborone, Botswana

Tel: +267 391 44 24

Fax: +267 391 44 17

Cell: +267 74476998

Email: [baboucarr.jaw@au-ibar.org](mailto:baboucarr.jaw@au-ibar.org)

Dr. ElZein Mohamed Bashir

P.O. BOX 25662

Gaborone, Botswana

Tel: +267 391 44 24

Fax: +267 391 44 17

Cell: +267 74623797

Email: [mohamed.bashir@au-ibar.org](mailto:mohamed.bashir@au-ibar.org)

Mr. Alex SAELAERT

Ag. Head of Project Support Unit

African Union/IBAR

P. O. Box 30786, 00100

Dr. Samuel MURIUKI

SPINAP Africa Coordinator

African Union/IBAR

P. O. Box 30786, 00100

Nairobi, Kenya

Tel: +254 02 3674000

Email: [samuel.muriuki@au-ibar.org](mailto:samuel.muriuki@au-ibar.org)

Nairobi, Kenya

Tel: +254 02 3674000

Email: [alex.saelaert@au-ibar.org](mailto:alex.saelaert@au-ibar.org)

Mr. Omari HOLAKI

Finance and Admin. Officer

AU/IBAR

P. O. Box 30786, 00100

Nairobi, Kenya

Tel: +254 02 3674000

Email: [omari.holaki@au-ibar.org](mailto:omari.holaki@au-ibar.org)

Mrs. Beatrice ADHIAMBO

African Union

P. O. Box 30786, 00100

Nairobi, Kenya

Tel: +254 02 3674000

Email: [beatrice.adhiambo@au-ibar.org](mailto:beatrice.adhiambo@au-ibar.org)

Dr. Dodji B. TAGODOE

Human Health Expert - SPINAP

African Union/IBAR

P. O. Box 30786, 00100

Nairobi, Kenya

Tel: +254 02 3674000

Email: [dodji.tagode@au-ibar.org](mailto:dodji.tagode@au-ibar.org)