



REPORT OF THE WORKSHOP

REGIONAL POLICY SENSITISATION ON NEWCASTLE DISEASE IN WEST AND CENTRAL AFRICA WORKSHOP REPORT

June 2017

Prepared by:

West African Network for Promotion of Short Cycle Animals
(REPAC)

ACKNOWLEDGEMENTS



This report was written by Dr. Samuel MINOUNGOU of the West African Network for the Promotion of Livestock in rural areas (REPAC).

REPAC would like to express its gratitude first, to GALVmed and secondly, to all the participants at the regional sensitisation Workshop on Newcastle disease held on June 29 - 30, 2017 in Ouagadougou. REPAC specifically acknowledges and thanks GALVmed regional office team in Kenya: Dr. Abdallah Twahir, Director MD&A, Mr. Julius Singoma Kagamba, Manager P&EA, Dr. Jean

Narcisse Koffi, Poultry Manager West Africa, Ms Pamela Sulwey, for not only providing us with the opportunity to facilitate the workshop, but also for all the support received before, during and after the workshop through providing administrative and logistics support during the workshop. Many thanks to Mr. Samuel Yameogo of Royal Beach Hotel who ensured all guests were ably taken care of.

The facilitation was ensured by Dr. Samuel Minoungou (Consultant/REPAC Executive Secretary). We acknowledge the contributions of Dr. Ouattara Seydou Director of CPAVI who prepared the field visit at Koudougou; Julius S. Kagamba and Jean Narcisse towards the design of the workshop.

Finally, we would like to express our sincere gratitude to each and every individual who participated in, or presented, or otherwise contributed their time, expertise and insights to the successful regional policy sensitization workshop and this report.

Thank you very much.

LIST OF ACRONYMS

CAHW Community Animal Health Workers

CPAVI Centre de Promotion des Animaux Villageois

DGSV Direction Générale des Services Vétérinaires

GALVmed Global Alliance for Livestock Veterinary Medicines

M&E Monitoring and Evaluation

MD&A Market Development and Access

NGO Non-governmental organisation

P&EA Policy and External Affairs

R&D Research and Development

REPAC West African Network for Promotion of Short-cycle Animals

1. INTRODUCTION



Photo 1: group photo of participants

The Global Alliance for Livestock Veterinary Medicines (GALVmed) in partnership with West African Network for the Promotion of Short Cycle Animals (REPAC) held an international workshop in Ouagadougou from 29th to 30th June 2017. The main objective was to enhance understanding and cooperation among ND vaccine suppliers/distributors, local technical representatives and implementing partners in the delivery of quality livestock health products and services to small holder farmers in West and Central Africa (see Appendix I for the agenda). The workshop was facilitated by the West African Network for the Promotion of Short Cycle Animals (REPAC) and attended by 38 participants, including GALVmed implementing partners, civil society organizations working in the field of livestock, researchers, and practitioners from the public and private sectors (AppendixII).

GALVmed is a global product development and access partnership that focuses on poverty alleviation by developing and disseminating animal health products through its unique partnership approach. Established in 2005, GALVmed seeks to make livestock vaccines, diagnostics and medicines accessible and affordable to the millions in developing countries for whom livestock is a lifeline by working with partners at each node of the value chain. With its headquarters in Edinburgh, Scotland, GALVmed has regional offices in Nairobi, Kenya and New Delhi, India. GALVmed currently works in 20 countries in Sub-Saharan Africa and South Asia.

In West and Central Africa, GALVmed is working with various partners mainly on Newcastle disease. While undertaking its programs over the last few years, GALVmed realized the importance of bringing together various actors in ND control. By building on the experiences of partners, experts and other practitioners, GALVmed seeks

to develop a more focused approach to strengthen its work on the control of Newcastle disease and hence increase the sustainable impact of its programs and make a difference.

GALVmed has made a strategic choice to mainstream ND control in West and Central Africa (see Box 1 for the workshop's objectives).

The two-day workshop was held in Burkina Faso for 38 representatives of West and Central African countries where GALVmed has projects on vaccination against Newcastle disease, notably Nigeria, Cote d'Ivoire, Burkina Faso, Cameroon and Mali.

The workshop was co-organised by GALVmed and the West African Network for the Promotion of Livestock in Rural Areas (REPAC). The workshop was opened by Souleymane Pindé, Director of Animal Production in the Ministry of Livestock of Burkina Faso.



Photo2 : opening ceremony Dr Abdallah Twahir GALVmed (at right) Mr Souleymane Pindé Ministry of Livestock Burkina (in centre) and Dr Narcisse Koffi GALVmed (at left)

The workshop took place on 29-30 June 2017 in Ouagadougou, Burkina Faso and brought together representatives of the countries, both from the government and private sectors including veterinarians, vaccinators and farmers; representatives of ND vaccine manufacturing companies like MCI Santé Animale and distributors like Laprovet together with their local partners like CAPHAVET and CPAVI. The workshop had a day for presentations and discussions and a day for a field visit to Koudougou where participants met and discussed with backyard/village poultry farmers and vaccinators.



Photo 3: field visit and interaction avec poultry vaccinators and farmers

The workshop identified key challenges and came up with possible necessary interventions to deal with those challenges at the level of farmers, vaccinators, NGOs, private practitioners and government. They agreed to keep coordinating their activities and sharing best practices noting that Burkina Faso is the leading country in the region in terms of vaccinating against ND. The workshop was closed by Dr. Germaine Minoungou spouse Compaore, head of Burkina Faso National Veterinary Diagnostic Laboratory.

GALVmed was represented by Abdallah Twahir, Jean Narcisse Koffi and Julius Singoma Kagamba.



Photo 4: Closing ceremony Dr Abdallah Twahir GALVmed (at right) Dr Germaine Minoungou Ministry of livestock Burkina (in centre) Dr Michel Nanéma Président of National Order of Veterinarians Burkina Faso (at left)

Box 1: Objectives of the workshop

1. To enhance understanding and cooperation among ND vaccine suppliers/distributors, local technical representatives and implementing partners in the delivery of quality livestock health products and services to small holder farmers in West Africa.
2. To identify challenges, gaps, and opportunities in ND control in West Africa.
3. To agree on the possible individual and collective actions/interventions for addressing the challenges identified and going forward.

This report presents the key findings from the workshop and aims to complement the individual presentations. The first set of findings is a synthesis of insights from the workshop presentations. The second set concerns the field visit, group work and discussions. The third set of findings highlights key considerations. This is followed by conclusions from the workshop and specific recommendations.

2. **Synthesis of presentations:** this synthesis is done in boxes that highlights the main results of discussions among participants regarding the delivery of quality livestock health products and services to small holder farmers in West Africa.



Photo 5: the director of national veterinary diagnostic laboratory sharing her presentation



Photo 6: the representative of MCI santé animale sharing his presentation

Box 2: Situation of ND disease in Burkina Faso, the host of the workshop

- In 2016 national poultry number around 43,000,000 poultry of which village poultry represents 76% while commercial poultry accounts for 24%.
- Newcastle disease persists in enzootic form in the country;
- Mortalities range between 80 and 100% in backyard poultry with important economic losses;
- Weak vaccination coverage to around 40%;
- Organization of annual vaccination campaigns;
- Perspective enhance strategy control of ND which will associate live and inactivated vaccine.

Challenges include:

- Low logistic capacity for the control of ND ,
- Insufficient sensitization of farmers,
- Threats of others diseases fowl pox and fowl coryza;
- Insufficient coordination of interventions of NGO and projects in ND control.

It is noteworthy that in West Africa, Burkina Faso, is a leader in the control of ND because BF has a regular annual vaccination campaign against the disease and the rate of coverage is around 40% when this coverage is less than 20% for the other countries.

In line with the second objective of the workshop, the discussions brought out the information summarized in Box 3 below:

Box 3: Challenges and gaps for vaccine manufacturers in West and Central Africa

- **Vaccines used**
 - Two types of vaccines are used for the control of ND in West and Central Africa; an inactivated vaccine (Itanew) manufactured by Laprovet and a live vaccine(I-2) manufactured by MCI Santé Animale; both partners of GALVmed;
 - The packaging of the two vaccines is in vials of 100 doses;
 - Revaccination is every 6 months with Itanew and every 3 months with I-2.
- **Challenges**
 - Limited to low involvement of private vets;
 - Low medication rate;
 - Limited support for awareness and sensitisation of farmers.
- **Perspectives**
 - Sensitize veterinarians and vaccinators as well as farmers on financial benefits of vaccination;
 - Poultry keepers need continuous technical support;
 - Advocacy to key stakeholders;
 - Support establishment of market channels for village poultry producers; cooperative and other rural schemes.

Among the challenges that face ND vaccine manufacturers in West Africa the major challenge remain the limited involvement of private vets in the distribution channel of ND vaccine. That situation is critical because it poses with acuity the problem of sustainability of actions on the field. It is therefore very important to find ways to get those actors involved



Photo 7: the representative of GALVmed sharing his presentation

GALVmed used the opportunity of this workshop to also highlight its interventions in West Africa as summarised in Box 4:

Box 4: GALVmed's work on ND control in West and Central Africa

- **A Pressing Need: The Macro View**
- **Macro-environment:** the growing need for protein
 - In India and Nepal, over 50% of children are stunted.
 - For Sub-Saharan Africa, the figure is 40%.
 - Every 1g of extra protein -> one less death per 1,000 live births.
 - By 2050, Africa's population will have doubled to 2.4 billion, making the issue of food security doubly imperative.
- **A Pressing Need: The Micro View What Livestock Vaccines Provide**
A Farmer who invests in vaccination earns 10 times return on investments
- **GALVmed Programmes broadly fall into two general categories of work:**
 - Product Development – substantial global network of R&D partners developing new / enhancing existing vaccines, medicines and diagnostics
 - Market Development in the following countries: Kenya, Uganda, Tanzania, Malawi, Ethiopia, Nigeria, Burkina Faso, Mali, Ivory Coast, Mozambique, South Sudan, DRC, Burkina Faso, Cameroun, India, and Nepal.
- **Policy Support**
 - Regulatory Harmonisation;
 - Facilitating mutual recognition of vaccine registrations across Africa;
 - Supporting synergies in the relative roles & responsibilities of vets vs. paravets/ community animal health workers;
 - Promoting the benefits of vaccination.
- **Challenges**
 - Limited awareness of farmers on animal health products and their uses
 - Unreliable quality of vaccines from local laboratories/facilities.
 - Occurrence of other poultry diseases
 - Manufacturers producing vaccine are not selling full pack of vaccine, droppers and their diluent

In the presentation GALVmed also shared insights gained from its animal health service delivery experiences in Sub-Sahara Africa and South Asia drawing areas of interest to West Africa Region. Participants were able to understand and appreciate GALVmed's role not only in West Africa but in other parts of Sub Sahara Africa as well as in South Asia.



Photo 8: the representative of Laprovect sharing his presentation

Box 5: Challenges and perspectives of ND projects in West and Central Africa

Local partners are implementing projects for the control of ND in Cameroon, Mali, Burkina Faso, Ivory Coast and Nigeria.

▪ **Challenges**

- Lack of proper and adequate sensitization of village chicken owners;
- Several independent organizations embark on control of ND in village chickens without proper coordination;
- Lack of logistics to ease the storage and transportation of vaccines and the movement of actors on the field, etc.;
- Inadequate number of certified vaccinators of village chickens against ND disease
- Lack of adequate supplies and availability of ND vaccine;
- Large vaccine dose packs unsuitable for small size village household flocks;
- Lack of village poultry farmers' organizations;
- Difficulties to organize regular training courses and refresher courses for field actors.

▪ **Perspectives**

- To train and certify more ND vaccine vaccinators for village chickens.
- Adequate sensitization of village chicken owners.
- To establish a network of organizations involved in vaccination for the control of ND to prevent duplication and enhance synergy.

- Sustainable funding for regular yearly ND vaccination campaigns in rural poultry.
- To provide adequate, affordable and regular supply of ND vaccines.
- To provide logistics to ease and facilitate all the activities important for the control of ND.
- To support and develop poultry farmers organizations into groups.to prevent duplication and enhance synergy.
- Sustainable funding for regular yearly ND vaccination campaigns in rural poultry.
- To provide adequate, affordable and regular supply of ND vaccines.
- To provide logistics to ease and facilitate all the activities important for the control of ND.
- To support and frame poultry farmers organization into groups.

GALVmed partners who are implementing ND projects in West and central Africa face different challenges among them three are really critical; lack of farmers' organizations to better involve them in the projects, limited sensitization of farmers on impacts on vaccination against ND and low equipment and logistics proper organization of ND vaccination campaigns.



Photo 9: visit of a farm in Koudougou city



Photo 10: interaction avec farmer during field visit in Koudougou city

Box 6: Field visit at Koudougou

The field visit at Koudougou, a city located 90 km from Ouagadougou allowed participants to visit farmers' production units and to interact with village poultry vaccinators and village poultry farmers.

▪ **Challenges**

- Insufficiency in sensitization of village chicken owners on vaccination benefits;
- Lack of material (refrigerators and cold boxes) to maintain the cold chain for storage and transportation of vaccines;
- Large vaccine dose packs unsuitable for small size village household flocks;
- Lack of refresher training courses;
- Vaccination of chicken at credit.

▪ **Perspectives**

- To ensure adequate sensitization of the village chicken owners;
- To provide material for cold chain;
- To provide adequate vaccine dose format for village poultry;
- To provide logistics to ease and facilitate all the activities important for the control of ND.

The farmers and vaccinators shared their experiences and challenges that rhymed with those that had been identified in the plenary discussions of the workshop.



Photo 11: the facilitator during the plenary group work

Box 7: Group work

Plenary group work generated the following table that shows the challenges identified, the solutions recommended and the relevant actors common to participating countries.

Challenges	Solutions	Actors
Inadequate organization of village poultry farmers	Support to organization of village poultry farmers	Governments, local collectivities, private vets, projects, NGO, farmers
Poor logistic capacity of actors for the control of ND	Reinforcement of logistic capacity (transport means, material for storage and transport of vaccines)	Governments, local collectivities, private vets, projects, NGO, farmers, village poultry vaccinators
Inadequate government involvement in ND control in village poultry	Advocacy towards governments for their better involvement in ND control in village poultry	Farmers organizations, private vets, projects, NGO

Inadequate sensitization of farmers	Organization and reinforcement of sensitization campaigns of farmers on the control of ND	Governments, local collectivities, private vets, projects, NGO, farmers
Limited coordination of actions for the control of ND	To initiate coordination mechanisms at national, sub regional and regional level for actions on control of ND	Governments, local collectivities, private vets, projects, NGO
Limited number of certified village poultry vaccinators for the control of ND	To Initiate certified trainings to an adequate number of village poultry vaccinators	Poultry vaccinators, Governments, local collectivities, private vets, projects, NGO
No satisfaction of village vaccinators of packaging of vaccines available	To discuss with vaccine manufacturers in order to make available packaging of vaccine for village vaccinators	Laboratories, farmers' organizations, Governments, local collectivities, projects, NGO, poultry vaccinators
Low and poor involvement of private vets in the control of ND in village poultry	Reinforcement of involvement of private vets in the control of ND	Governments, local collectivities, private vets, projects, NGO

Most recommendations made by participants at the workshop were to governments and animal health service practitioners including the private sector as well as farmers, in terms of advocacy, sensitization, resourcing, repackaging and so on, as shown in the foregoing account.

Two recommendations were addressed to GALVmed on its policies and on collaboration with regional organizations on village poultry production:

Given the developmental dynamics in GALVmed's areas of operations, and while, flexibility and practicality should be engrained elements of the ND strategy, the strategy should remain a 'live' document, to be reviewed as is necessary in order for it to remain relevant in the changing implementation environment.

GALVmed should invest in ND assessment of key partner organizations at regional level with the aim of supporting them to embrace ND control mainstreaming. Specifically for partners, there is need for:

- Clear terms of ND control for partnerships;
- Capacity building role;
- Necessity for a strong M & E oversight.

Government to improve the policy and infrastructure environment for animal health service delivery including ND control.

Animal health service providers to coordinate their efforts rather than working silos and duplicating resources on a common challenge like ND.

3. KEY CONSIDERATIONS FOR THE CONTROL OF ND IN WEST AND CENTRAL AFRICA

- Apart from Burkina Faso where there is an annual vaccination campaign, there are no vaccination campaigns against Newcastle disease in the other countries. This state of affairs is explained by the fact that during the past years, those countries were vaccinating village chickens free of charge and due to lack of funds those vaccinations have since ceased. All the participating countries at the GALVmed-REPAC workshop appealed to their governments to get more involved in the control of Newcastle disease in village poultry.
- The vaccination coverage rate is around 40% for Burkina Faso while for the other countries those rates are less than 20%. Hosting the workshop in BF was considered a recognition of BF and inspirational to other countries.
- The packaging of ND vaccine in vials of 100 doses after long discussions is not such a big problem but is due to insufficiency of organization of vaccination campaigns because some countries have experience the use of vial of 1,000 doses in vaccination campaigns
- The workshop participants agreed on the fact that deworming chicken before or when vaccinating them against Newcastle disease is an important stage to get good immunity response to vaccination.
- The private vets are not enough particularly those involved in the control of ND in village chickens; participants considered that involvement as an important issue for the sustainability of actions in the field. They urged GALVmed, since that organization is a leader in that strategy of sharing experience, to find ways to support that involvement in the projects conducted in the concerned countries.

4. CONCLUSION

Participants acknowledged and appreciated GALVmed's investment in organizing the workshop to share experiences on ND control, and specifically to highlight proposals on how best the countries could develop and position their national strategies for the control of ND. This, participants concurred, was unique and the way to go in developing forward looking, dynamic strategies. The workshop provided an enabling platform for a useful discourse on ND control, participants learning from one another and making proposals that are appropriate to their respective countries

Participants observed that whereas ND control strategies are developed, implementing them requires commitment, resources, persistence, patience and constant negotiations. ND control mainstreaming faces numerous challenges in organizations and programs.

There is a need to convince governments to get more involved in the control of ND in village poultry. This will be a process requiring more advocacy mainly from civil society (farmers' organizations) and the private sector.

Most importantly, beyond the countries' policies on ND control around which discussion focused during the workshop, there is a need to explicitly develop and incorporate technical and client-related customer-focused features. It should address the question posed daily by GALVmed: *"...how to make livestock vaccines, diagnostics*

and medicines accessible and affordable to the millions of people in developing countries for whom livestock is a lifeline.” This will require reviewing GALVmed’s goals, strategies and actions in the countries by better involving private sectors for the sustainability of actions.

Appendix I: THE REGIONAL POLICY SENSITISATION WORKSHOP ON NEWCASTLE DISEASE AND VILLAGE POULTRY WEST AFRICA

Time	Activity	Responsible Person
Arrival	Wednesday - 28th June 2017	All
Day One – Thursday 29th June 2017		
08h00-08h30	Registration of participants	All
08h30-8h45	Welcome Remarks:	Mr Souleymane Pindé , DGPA Dr. Abdallah Twahir, GALVmed
08h45-09h00	Opening remarks:	DVS BF
Opening Session: Chair, Dr.....		
09h00-09h10	Workshop objectives	Facilitator
	Overview of the workshop program and participants’ expectations	Facilitator
09h10-09h25	ND control Policies in Burkina Faso	Joseph Savadogo - DVS Burkina
09h25-09h40	Challenges, gaps and opportunities in ND vaccination for Cameroon and Mali	Baptiste Dungu, MCI Morocco
09h40-09h55	Challenges, gaps and opportunities in ND vaccination for Burkina Faso and Senegal	Pierre Vennetier Laprovet, France
09h55-10h10	GALVmed’s work on ND control in West and central Africa	Abdallah Twahir
10h10-10h30	Plenary discussion	Facilitator
10h30-11h00	Group photo followed by Health Break	All
11h00-11h15	Challenges, gaps, and opportunities in the ND project in Cote d’Ivoire	Narcisse Koffi,
11h15-11h30	challenges, gaps, and opportunities in the ND project in Burkina	Ouattara Seydou - CPAVI
11h30-11h45	Challenges, gaps, and opportunities in the ND project in Cameroon	Azibe Mazra - Caphavet
11h45-12h00	Challenges, gaps, and opportunities in the ND project in Nigeria	Yakubu Yanet Ago

12h00 – 12h30	Plenary discussion on challenges, gaps, and opportunities in the ND project areas	Facilitator
12h30-13h30	Lunch	All
13h30-14h30	Group work 1: Challenges, gaps and opportunities in ND control West Africa	All
14h30-15h15	Plenary presentations from group work	Facilitator
15h15-16h15	Group work 2: Interventions for addressing identified challenges	All
16h15 – 17h00	Plenary presentations from group work	Facilitator
17h00 – 17h30	Summary and Day 2 field work planning	Facilitator & Koffi
Day Two – Friday 30th June 2017		
07h30	Field visits	All
09h00-13h00	<ul style="list-style-type: none"> • Reach field of Laprovect/CPAVI project (Koudougou) • Field visit (Interaction with farmers, vaccinators and project staff) • Leave the field and return to hotel in Ouagadougou 	Details (venue) by Koffi on the day of the visit.
13h00-14h30	Lunch at the Hotel	
(1hr)	Restitution field visit	
(30min)	Summary and next steps	
(20min)	Closing of the workshop	

Appendix II: List position and contacts of Workshop Participants

No.	Category of participants	Name/fonction	E-mail	Tel No:
1	Nairobi, Kenya	Dr. Abdallah Twahir – Director – MD&A	abdallah.twahir@galvmed.org	+254 772157782
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7	Accra, Ghana	Dr. Joseph Adongo Awuni Director veterinary Lab Accra	josephawuni@hotmail.com	(+233) 208116397
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15	Lagos, Nigeria	Paul Abdu REPAC National representative Nigeria / University of Zaria	paabdu2004@yahoo.com	(+234) 8034747858
16	Ouagadougou, BF	PINDE Souleymane Director of Animal productions Burkina Faso	souleymanep@yahoo.fr	(+226)
17	Dakar, Senegal	Dominique Mandiamy REPAC National representative Sénégal/ Cathwell Sénégal	mandiamyd@yahoo.fr	(+221) 776574212
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Appendix III: Welcoming Remarks by Dr Abdallah Twahir Director MD&A, GALVmed

INTRODUCTION

GALVmed is a not-for-profit organization registered in England and Scotland with offices in Edinburgh – Scotland, New Delhi – India and Nairobi – Kenya.

We work in selected countries in Sub-Saharan Africa and South Asia, however R & D work is done in any country where the suitable technology is located. Market Development and Policy work is done primarily in Africa and in Asia.

Because we cannot work in all countries, we occasionally organise these kinds of workshops and meetings to exchange ideas, discuss issues and solutions, and basically learn from each other.

I therefore urge all of us to actively engage with people that you are not familiar, especially with from different countries than your own. The purpose here will be to cross-fertilise ideas and share experiences.

With these few words, I wish all of you/us fruitful discussions AND hope that this will set in a motion a period of continued communication amongst animal health players in the region.

Many thanks and best wishes.

Appendix IV: Workshop Official Opening Speech by Alexandre Ouedraogo, General secretary of Ministry of fisheries and animal resources (Read by Souleymane Pindé); On 29th June 2017.

The organizers, distinguished guests, ladies and gentlemen,

This opening ceremony of the international seminar on ND gives me a great pleasure to welcome all those who came to attend Ouagadougou meeting.

I would like to remind that Livestock is among the important economic sectors for African countries. With 18% contribution to GDP livestock is the third money provider behind gold and cotton in Burkina Faso. Animal products represent 26% of export public revenues.

With a national poultry number of 44 791 551; the local breeds represent 98% and constitutes an important source of incomes for farmers. Chickens are used in many rituals and religious ceremonies like weddings, baptisms.

More than 86% of rural households are raising chickens and in urban areas commercialization and transformation of poultry products provide thousands of jobs through grilled chicken, roasted chicken, smoked chicken... In 2011 for example 31 000 chickens were daily consumed in Ouagadougou city and 22 000 chickens in Bobo Dioulasso.

Despite that importance, village poultry production faces technical constraints mainly due to Newcastle disease.

The impact of that disease on village poultry production is highly important because it is responsible of big losses in the flocks. In fact the disease can kill 80 to 100% of no vaccinated chickens. In order to stop those losses due to the disease the ministry of fisheries and animal resources of Burkina Faso in partnership with Galvmed through Laprovvet

try to control the pathology. Thus in 2016, 18 278 982 poultry have been vaccinated against ND. However, those performances are lower than expected and there is a need to increase our efforts. It is the reason why I appreciate this international seminar on ND who will enable a share of experiences among participants but more important it will serve to define big orientations who reinforce actions to control that pathology

Ladies and gentlemen

I appreciate the efforts of all actors involved in the control of Newcastle disease. I urge them to increase their efforts and by doing so together we will overcome that disease responsible of huge economic losses for village poultry farmers in Burkina and in Africa.

I cannot end my speech without renewing the acknowledgements of the Ministry in charge of livestock to Galvmed for the support to fight Newcastle disease.

With the hope that the support will continue and be reinforced that I declare opened the international seminar on Newcastle disease.

Thank you.

Appendix V: Official Closing Speech by Alexandre Ouedraogo, General secretary of Ministry of fisheries and animal resources (Read by Dr Minoungou Germaine ep. Compaoré)

GALVmed members, vaccines manufacturers, field actors on ND, Ladies and gentlemen,

It gives me great pleasure to be associated with this important forum for strategizing on how to mainstream ND control strategies in the countries. Village poultry plays an important role in the livelihoods of people as it is a source of income generation, food and nutrition. It also contributes to crop production and sustainable land use.

Ladies and Gentlemen,

Village poultry can indeed contribute to the reduction of poverty and hunger and thus enable countries achieve the MDG number one (eradicate absolute poverty and hunger) and three (promote gender equality and women's empowerment).

During those two days fully busy we shared experiences on how to better control Newcastle disease in our countries. It clearly appear that we will need to reinforce our partnership to better fight the disease through our regional economic communities and through other regional organizations less heavy and more performing on the field.

I hope that this workshop will not be the last but the beginning of a long and fructuous collaboration joint point for our countries.

Ladies and Gentlemen,

I further wish to thank GALVmed for organizing this forum for sharing experiences on the control of Newcastle disease and all the participants who turned up at this workshop. As you travel back to your stations, I wish you journey messes.

Finally, I now declare this workshop officially closed.

Feedbacks from participants

Even if the time did not allow for a formal evaluation of the workshop some feedbacks have been collected during tea breaks by the facilitator.

Participants at the workshop gave very complimentary ratings of the workshop, with many indicating that the workshop covered a lot of material within a very short duration, and more pointedly, that they had learned a lot over the two day period. However, there is still a lot that was not covered and more still to be learnt.

Participants pointed out that they enjoyed all sessions, however, the break out and plenary feedback sessions were rather short. Indeed some attendees think that such workshops should last 3 – 4 days.

Others called for a series of workshops to enhance sharing of knowledge and experiences.