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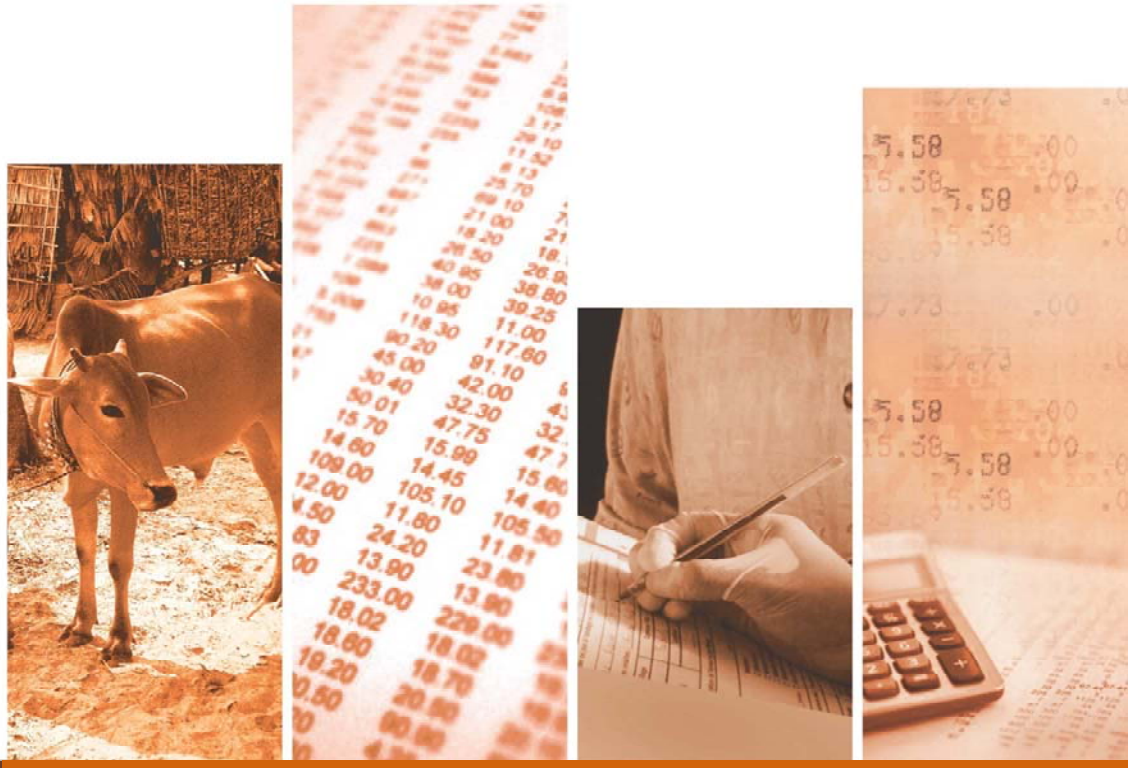
PVS Gap Analysis Report

Nigeria



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PVS Gap Analysis report

Federal Republic of Nigeria

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LIST OF ACRONYMS, ABBREVIATIONS AND/OR SPECIAL TERMS

AH	Animal Health
AICP	Avian Influenza Control and human pandemic preparedness and responses Project
ARIS	Animal Resources Information System IBAR
ASF	African Swine Fever
CAR	Central African Republic
CBPP	Contagious Bovine Pleuro-Pneumonia
CC	Critical Competency
CVO	Chief Veterinary Officer
CVSN	Council of Veterinary Surgeons of Nigeria
DVM	Doctor in Veterinary Medicine
DVS (State)	Department of Veterinary Services at State level
EA	European co-operation for Accreditation
EC	European Commission
ECOWAS	Economic Community of West African States (Abuja)
ELISA	Enzym-Linked Immuno-Sorbent Assay
EU	European Union
FAO	Food and Agriculture Organisation,
FCT	Federal Capital Territory (Abuja)
FDL	Federal Department of Livestock (Abuja)
FDLPCS	Federal Department of Livestock and Pest Control Services
FMD	Foot and Mouth Disease
FVP	Field Veterinary Post
FQS	Fisheries Quarantine Service
GDP	Gross Domestic Products
HPAI	Highly Pathogenic Avian Influenza
LD	Livestock Development
LGA	Local Government Authority
MDG	Millenium Development Goals
MSc	Master of Science
MoH	Ministry of Health
NADIS	National Animal Disease Information and Surveillance FDLPCS
NAFDAC	National Agency for Food and Drug Administration and Control
NAQS	National Agency for Quarantine Services
NBTE	National Board for Technical Education
NCD	Newcastle disease
NCPVS	National Committee for the Privatisation of Veterinary Services

NGN	Nigerian Naira
NLC	National Livestock Committee
NVMA	Nigerian Veterinary Medical Association
NVQS	National Veterinary Quarantine Service
NVRI	National Veterinary Research Institute
OIE	World Organisation for Animal Health
OIE-PVS	OIE Tool for the Evaluation of Performance of Veterinary Services (OIE-PVS Tool)
PACE	Pan-African programme for the Control of Epizootics
PCR	Polymerase Chain Reaction
PhD	Doctor of Philosophy
PPR	Peste des Petits Ruminants
PQS	Plant Quarantine Service
QMS	Quality Management System
QNS	Quality Networks Solution
RP	Rinderpest
SOP	Standard Operation Procedure
SPS	Sanitary and Phyto-Sanitary (agreements)
TAD	Trans-boundary Animal Disease
TB	Tubercles Bacillus (Tuberculosis)
TLU	Tropical Livestock Unit
USD	United States Dollar
VCN	Veterinary Council of Nigeria
VPH	Veterinary Public Health
VQS	Veterinary Quarantine Station
VS	Veterinary Service(s)
VSB	Veterinary Statutory Body
VSIMS	Veterinary Services Information Management System
VLU	Veterinary Livestock Unit
VTH	Veterinary Teaching Hospital
WB	World Bank
WHO	World Health Organisation
WTO	World Trade Organisation

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EXECUTIVE SUMMARY

As a first step, the national priorities were identified with the FDL and other institutions involved in Nigerian VS were identified as follow:

- Policy on livestock development (LD) and trade:
  - LD1: To be self-sufficient by increasing the animal productivity;
  - LD2: Improve the management of food chains: trade, traceability;
  - LD3: Use the potential of the country to export some animal products.
- Technical priorities in **Animal Health (AH):**
  - AH1: Surveillance of the priority diseases: CBPP, PPR, brucellosis, tuberculosis; FMD, ND, ASF, rabies.
  - AH2: Implement some active surveillance for TB, Brucellosis, and ASF.
  - AH3: Improve early detection and emergency response for HPAI, RP, ASF, FMD, PPR, CBPP, Rabies and ND.
  - AH4: Control of CBPP and PPR through mass vaccination of susceptible populations and ND (vaccination in around 25% of the free-range birds).
  - AH5: Progressive eradication of ASF in a specific area
- Technical priorities in Veterinary Public Health (VPH):
  - VPH1: Improve slaughterhouses management and inspection.
  - VPH2: Improve quality, distribution and use of veterinary drugs..
- Policy on organisational structure and management of the **Veterinary Services (VS):**
  - VS1: Strengthen the chain of command and coordination capacities.
  - VS2: Improve data collection and management for decision.

The targeted level has been defined for each critical competency of the OIE PVS Tool. During the PVS evaluation, most of the critical competencies have been assessed as being between level 2 and 3. The targeted level at the end of the plan is between level 3 and 4, except for some critical competencies which are not strategic for the Nigerian VS.

The following table summarizes the main findings and recommendations issued from this PVS Gap Analysis report.

The PVS Gap Analysis has highlighted the federal priorities and defined a strategy for Nigerian VS.

The total annual budget (76.2 M USD) is compatible with the funds available and in accordance with livestock issues. Even if this Gap Analysis is mainly a federal approach, it could be possible for some states to complete this budget for some specific actions at state level.

The success of the PVS Gap Analysis plan is dependent on the quality of the coordination between the FDL and the State VS, the FDL and the other institutions and on the commitment of each state to apply a commonly defined policy.

Pillar	Objectives	Recommended activities	Needed resources
International Trade	• The NAQS is the new agency in charge of border control (veterinary quarantine service, plant quarantine service, fisheries quarantine service). The first objective is to adapt the organisation of the NAQS to its mandate optimising the border control. • The second objective is the development of animal identification and movement control, with a priority for imported live animals. • The third objective is to develop the capacity of compartimentalisation of some commercial farms to export to neighbouring countries.	• A study of the organisation of the border control posts: definition of an optimised organisation of the border posts, assessment of the needed physical and financial resources, coordination with other insitutions (custom services, NAFDAC…). • Upgrading the procedures for inspection at border posts and training of staff. • Definition and implementation of a strategy for animal identification and movement control for animals from other countries. • Cost-benefit analyses and feasibility study for a compartmentalisation strategy to export some animal products (pig, poultry…).	• It has been difficult to precisely assess the human and physical resources before the recommended study. • Taking into account the data gathered during the mission, we have calculated a minimum estimate: (i) an annual budget approximately 14.1 M USD for this pillar, (ii) an exceptionnal budget of 0.9 M USD for investment in border posts and studies.
Animal Health	• The strategy for the priority diseases has been clarified: mass vaccination for PPR and CBPP, improvement of the knowledge of brucellosis and tuberculosis (prevalence, origin, feasibility of control measures), strengthening the capacity to manage FMD outbreaks, development of ND vaccination, maintenance of the Nigeria status for Rinder pest and HPAI. • Improvement of passive surveillance.	• The main activities for the priority diseases have been defined: - Training of field veterinarians (private and public) to improve passive surveillance, - some active surveillance on brucellosis, tuberculosis, - upgrading contingency plan for FMD, Rabies, - vaccination campaigns for CBPP and PPR, - definition & implementation of an adapted eradication programme for ASF in some states. • The needs for a sustainable field veterinary network have been defined. 1400 Field Veterinary Posts are necessary. Currently, we consider that approximately 680 exist. Accordingly, another 720 FVP must be created through delegated activities for private veterinarians.	• The resources for the field veterinary network must be organised around the 1400 FVP. More than 50% of this network could be based on private veterinarians. • An annual budget of 41.6 M USD is required with 6 to 7 M USD to be allocated to vaccines, 9.5 M USD to delegated activities (vaccination) for private veterinarians. An exceptional budget of 183 K USD for expertise (national and international) is also necessary for the 5 year plan.
Veterinary Public Health	• Improvement of meat inspection. • Improvement of food safety of the dairy sector (processing of raw milk). • Strengthening of the veterinary medecines and biological controls: imported products and distribution. • Implementation of residues (antibiotics, antiparasites) control plan.	• Definition and implementation of a meat inspection plan: upgrading regulations, adjusting procedures, training inspectors, organisation of supervision; • Development of a programme to improve milk safety: updating regulations, tests on brucellosis and tuberculosis, development of HACCP procedures • Strengthening the coordination of veterinary medicines and biological policy between FDL and NAFDAC, development of inspection on field distribution • Development of a residue testing plan.	• Around 400 veterinarians and 900 veterinary paraprofesionnals with their equipment and facilities are required to cover the country. • An annual budget of 15.1 M USD is necessary including 11 M USD allocation for salaries, 0.3 M USD for continuing education

Veterinary Laboratories	• Development of regulation for veterinary laboratories in order to involve private laboratories in the VS network and in order to identify all the laboratoires involved in animal health and veterinary public health activities. • Strengthening the technical capacities of the field laboratories and development of quality management system in the reference laboratories (NVRI, NAFDC…) and in other laboratories.	• Updating legislation • Development of technical SOPs for field laboratories and organisation of proficiency tests. • Preparation for ISO 17025 accreditation of the reference laboratories. • Training and consulting on quality management of laboratories.	• Human and physical resources have not been assessed for laboratories. • The budget only estimates the expenses for the recommended activities. The budget for the tests prescribed are included in the budget recommended for technical activities. • An annual budget of around 50 K USD has been defined for continuing education and an exceptional budget for 5 years of 183 K USD for expertise.
Management and Regulatory Services	• Strengthening the coordination and the chain of command. • Improvement of the management of resources and operations • Improvement of cross-cutting competencies.	• Development of procedures: to ensure technical independence of the decisions, to improve coordination between different levels (LGA, State, Federal level) • Study on the physical and human resources at different levels. • Development of a VSIMS (Veterinary Services Information Management System). • Strengthening initial training, continuing education…	• Approximatively, 170 veterinarians and 140 other staff are necessary for the management of all activities in federal and state levels (excluding field activities). • An annual budget of around 5.6 M USD has been estimated and an exceptional budget of 782 K USD has been estimated for expertise for a period of 5 years.

METHODOLOGY OF THE PVS GAP ANALYSIS MISSION

A PVS Gap Analysis mission facilitates the definition of a country's Veterinary Services' objectives in compliance with OIE quality standards suitably adapted to national priorities and constraints. The country PVS Gap Analysis report includes an indicative annual budget and one exceptional budget (for exceptional investments), when relevant, consolidated to propose an indicative five-year budget for the Veterinary Services. In practice, this means:

- To define with the VS, in accordance with their national priorities and constraints, the targeted improvement over a five-year period for each critical competency described in the OIE PVS tool;
- To determine the activities to be carried out in order to achieve the targeted results for all the critical competencies of the OIE PVS Tool which are relevant to the national context of the country;
- To determine, with the help of information, data or interviews, the tasks and human, physical and financial resources needed to implement these activities to strengthen the VS. The methodology used to determine the required resources is described in Appendix 1.

I The PVS Gap Analysis process

By request of the Federal Department of Livestock and Pest Control Services (FDLPCS) of the Federal Ministry of Agriculture and Water Resources of the Federal Republic of Nigeria, an evaluation of the Nigerian Veterinary Services (VS) was conducted by OIE accredited experts from August 20th to September 5th, 2007, using the OIE Tool for the Evaluation of Performances of Veterinary Services (OIE-PVS Tool).

This evaluation highlighted strengths and weaknesses of the Nigerian VS and proposed recommendations to improve the overall performance of the national VS.

To go further with these recommendations, Nigeria requested an OIE-PVS Gap Analysis mission in a letter sent to the OIE Director General on July 9th, 2009. The mission was carried out in 2010 from 14th to 25th September, by a team of three OIE certified experts: Dr François GARY, Team Leader, Dr Bouna DIOP and Dr Helio Vilela BARBOSA, technical experts.

I.1 Background information

I.1.A Country details (geography, administration, agriculture and livestock)

Nigeria, located in Western Africa on the Gulf of Guinea has a total surface area of 923,768 km^2 and the largest human population in Africa (140 million in 2007). Nigeria has a varied landscape. The country is divided into thirty-six states and one Federal Capital Territory (FCT), which are further sub-divided into 774 Local Government Areas (LGAs). Nigeria's economy heavily depends on the oil and gas sector, which contributes to 99 % of export revenues, 85 % of government revenues, and about 52% of gross domestic product (GDP). Agriculture accounts for about 34.8 % of Nigeria's GDP and livestock contributes 7 % to overall GDP of the country.

Nigeria imports mainly live animals from neighbouring countries, and milk products.

Table 1. Current livestock census data

Animals species	Total Number	Systems of production
Cattle	16,293,200	Mainly extensive and some intensive farms for milk.
Sheep	33,874,300	Mainly extensive
Goats	53,800,400	Mainly extensive
Pig	6,908,030	Extensive and intensive systems
Poultry	175,000,000	Extensive and intensive systems
Asses	1,050,000	
Horses	207,830	

Source: FAOSTAT, 2008

Table 2. Animal and animal product trade data

Animals and animal products	Average annual import		Average annual export	
	Quantity	Value	Quantity	Value
Live animals	*(head)*	*(USD)*	*(head)*	*(USD)*
Cattle	380,000	80,000,000	(1)	(1)
Sheep and goats	507,945	13,827,000	(1)	(1)
Animal products	*(tonnes)*	*(USD)*	*(tonnes)*	*(USD)*
Milk whole dried	46,853	225,138,000	53	74,000
Milk skimmed dried	29,367	76,892,000	(1)	(1)
Milk whole evaporated	13,643	27,042	(1)	(1)
Butter cow milk	8,053	22,725,000	(1)	(1)

(1) Non significant trade

Source: FAOSTAT, 2007

I.2.B Current organisation of the Veterinary Services

The three levels of government, federal, state and LGAs have responsibilities in the administration of the VS.

- The federal level is in charge of the development of policies and policy implementation protocols, monitoring and coordination of development programmes, national disease control, and development of relevant legislation.
- The state veterinary services are in charge of disease control, provision of clinical services, livestock product quality control, meat inspection, extension and development of regulations..
- Local government veterinary services mainly participate as mobilization and extension agents in operational actions in close coordination with the State Area Veterinary Officers, livestock farmers, traditional institutions, law enforcement agents and other stakeholders to facilitate delivery of services, disease reporting, control of livestock diseases and pests. A private sector is in place.

Private veterinarians are mainly involved in the supply and distribution of veterinary drugs, vaccines, equipment and livestock feeds, and in the provision of routine clinical services, preventive care for livestock, and consultancy services.

The Federal Department of Livestock[1] (FDL) in the Federal Ministry of Agriculture and Rural Development is composed of eight divisions and has field offices at state capitals for ease of collaboration with the state DVS.

Two other federal institutions are involved in veterinary services missions:

- NAFDAC: National Agency For Food and Drug Administration and is in charge of registration and control of veterinary medicines and biologicals.
- NAQS: National Agency for Quarantine Services in charge of the border control and quarantine service.

I.1.C List of entities or sites related to Veterinary Services activities

The main entities related to VS activities in Nigeria include the National Veterinary Research Institute (NVRI), the Veterinary Council of Nigeria (VCN) and the faculties of veterinary medicine. NVRI is the national reference laboratory for the diagnosis and investigation of animal diseases. It is also involved in the production and testing of vaccines to control animal diseases in the country and conducts research and training in relevant veterinary fields. The VCN is in charge of regulating all veterinary training institutions and veterinary clinics to

[1] Initial name was *Federal Department of Livestock and Pest Control Services*

ensure compliance with the VCN approved Minimum Standard for Training and Practice of the Veterinary Profession and to enforce discipline among members of the profession. The VCN has established the College of Veterinary Surgeons (CVSN) in order to uplift professional standards and expose practicing veterinarians to current developments in the science and practice of veterinary medicine. There is also a Nigerian Veterinary Medical Association (NVMA). In 2007, Nigeria has five accredited faculties of veterinary medicine (Ibadan, Maiduguri, Nsukka, Sokoto, and Zaria). Three colleges of animal health and production located in Ibadan, Kaduna, and Vom also provide training for the veterinary para-professionals.

	Terminology or names used in the country	Number of sites
GEOGRAPHICAL ZONES OF THE COUNTRY		
Climatic zones	*Equatorial in South, tropical in centre, arid in North*	3
Topographical zones	*Tropical rainforest, Coast, Plateau, Savannah, Valleys, Sahel*	6
Agro-ecological zones	*Pastoral, Agropastoral, Crop*	3
ADMINISTRATIVE ORGANISATION OF THE COUNTRY		
1st administrative level	*Federal*	1
2nd administrative level	*State + Federal Capital Territory*	37
3rd administrative level	*Local Government Areas*	774
4th administrative level	*Villages*	
Urban entities	Cities	
VETERINARY SERVICES ORGANISATION AND STRUCTURE		
Central (Federal/National) VS	Federal Livestock Department	
Internal division of the central VS	Animal health, Veterinary public health, Pest control, Livestock development & pastoral resources, Commercial livestock	5
1st level of the VS	Directorate of VS	37
2nd level of the VS		
3rd level of the VS		
Veterinary organisations (VSB, unions…)	Veterinary Council of Nigeria (VCN) ; Nigerian Veterinary Medical Association (NVMA)	1 1
FIELD ANIMAL HEALTH NETWORK		
Field level of the VS for animal health		
Private veterinary sector		
Other sites (dip tank, crush pen….)		
VETERINARY MEDICINES & BIOLOGICALS		
Production sector		
Import and wholesale sector		
Retail sector		
Other partners involved		
VETERINARY LABORATORIES		
National labs	National Veterinary Research Institute (NVRI)	1
Regional and local labs	Veterinary Teaching Hospital (Ibadan, ABU, Nsukka, Maiduguri and Sokoto) NVRI zonal labs States labs	5 4 5
Other labs (private)	Animal Care Services, Ibadan Diversay Solutions Ltd, Lagos	2
ANIMAL AND ANIMAL PRODUCTS MOVEMENT CONTROL		
Bordering countries	Benin, Cameroon, Chad, Niger	4
Airports and ports border posts	MMIA; Nnamdi Azikiwe International Airport; P.H International Airport; MAKIA, Ungogo Quarantine Station; Maiduguri International Airport Onne; NPA 1 Area, P.H; Tin Can Island; Apapa	6 5
Main terrestrial border posts	Ikom; Idiroko; Seme; Imeko; Maigatari; Illela; Jibia; Gamboru Ngala; Mubi	9
Minor terrestrial border posts	Makurdi Interstate; NAHCO/SAHCO Cargo Shed; Kamba Control Post; Jebba Interstate Control Post; Lokoja Interstate Control Post	6
Quarantine stations for import		0
Internal check points		

Live animal markets		
Zones, compartments, export quarantines		0
PUBLIC HEALTH INSPECTION OF ANIMALS AND ANIMAL PRODUCTS		
Export slaughterhouse		0
National market slaughterhouses	Modern slaughter house	19
Local market slaughterhouse	Urban abattoirs	145
Slaughter areas/slabs/points	Slaughter labs	1934
On farm or butcher's slaughtering sites		
Processing sites (milk, meat, eggs, etc)		
Retail outlets (butchers, shops, restaurants)		
TRAINING AND RESEARCH ORGANISATIONS		
Veterinary university	Faculty of Veterinary Medicine (accredited)[2]	7
Veterinary paraprofessional schools	College of animal health and production	3
Veterinary research organisations		
STAKEHOLDERS' ORGANISATIONS		
Agricultural Chamber / room /organisation		
National livestock farmers organisations	Poultry association	
Local (livestock) farmers organisations		
Other stakeholder organisations		
Consumers organisations		

I.1.D Summary results of the OIE PVS Evaluation

The main findings of the OIE PVS Evaluation include the following:

- Although, the number of veterinarians is high, many of them are not in active veterinary practice;
- Inadequate recognition and support to the private veterinarians field network;
- Inadequate supervision of veterinary para-professional;
- Lack of specific continuing education programmes and budget provisions at FDL and the DVS levels;
- Existence of a chain of command between the FDL and the DVS for some activities;
- Stable organisational structure of the public sector of VS at federal and state levels ;
- Inadequate budget allocation at federal and state levels;
- Availability of resources to carry out disease diagnosis in NVRI, but inappropriate equipment of the laboratories located in the veterinary faculties;
- Appropriate field networks of professionals which allow the VS to conduct passive and active surveillance;
- Absence of risk analysis for the introduction of new diseases;
- Inadequate equipment of abattoirs and slaughter slabs except for one in Lagos;
- Absence of quarantine facilities;
- Absence of strategic and operational plans designed by the FDL

I.2 Purpose and methodology of the PVS Gap Analysis

The OIE-PVS Tool is divided into 4 fundamental components, each of them including 6 to 14 critical competencies (ex: quarantine and border security; traceability...). For each critical competency, a level of advancement between 1 and 5 was granted to the country from the OIE-PVS Evaluation process, according to the situation observed at that time. At the beginning of the PVS Gap Analysis process, the country has to define, for each critical competency, if it intends to reach a higher level of advancement or not and -if yes, which one (see II-2). The tasks to conduct, the schedule and the related budget are evaluated on these bases.

The basis of this work is the former OIE-PVS Evaluation. One should refer to the PVS Evaluation Report to fully understand the current PVS Gap Analysis report.

Remark: The PVS Gap Analysis excludes animal products from the aquatic animal sector because of the limited time available for this mission.

[2] There are 2 more faculties of veterinary medicine waiting for accreditation.

I.3 Structure and content of the PVS Gap Analysis report

This report is comprised of:

- The first part which provides the presentation of the methodology and the selected objectives for the country ;
- The second part which provides a presentation of the Gap Analysis with the relevant proposed strategy;
- The Appendices, all critical competencies cards in which the detailed activities are presented to strengthen each competency.

The estimation of the required resources (human, physical and financial) for VS as defined by the OIE Code was calculated for both Federal and State levels wherever possible and also included NAQS.

It was not possible to assess the global budget for veterinary faculties and laboratories during the time available for the mission:

- For the laboratories, the budget includes the costs of the analyses prescribed in the technical activities and the recommended action to support them (expertise, training...) but not the evaluation of the investment required.
- For the veterinary faculties, we have only assessed the budget for recommended activities in this card.

Appendix I explains the methodology used to prepare the budget.

II National and international priorities and expected levels of advancement

II.1 National priorities

Among the key priorities of the Federal Government of Nigeria is the achievement of sustainable growth in the agricultural sector which provides employment and livelihoods to major parts of the population estimated at approximately 140 million.

Table 3. Table for listing national priorities

Category of priorities	National priorities	Explanatory comments *(importance for the country)*
Policy on **livestock development (LD)** and trade	LD1: Become self-sufficient by increasing animal productivity.	By improving breeding, increasing feed resources for large and small ruminants and improving dairy development, the country will be self-sufficient in meat and livestock products.
	LD2: Improve management of food chains: trade, traceability.	Documented systems for animal identification and traceability need to be established as well adequate records for livestock products.
	LD3: Use the potential to export animal products.	Establishment of a disease free compartment in a selected area will allow the country to export animal products, mainly poultry products in neighbouring countries.
Technical priorities in **Animal Health (AH)**	AH1: Surveillance will focus on priority diseases: CBPP, PPR, brucellosis, tuberculosis; FMD, ND, ASF, Rabies.	
	AH2: Implement active surveillance for TB (in collaboration with Public Health); Brucellosis (mainly raw milk with processing units or dairy farm) and ASF in order to verify the prevalence of the diseases in the zones targeted for eradication.	The field network needs to be strengthened and a good chain of command from field to central level should be established. Some surveillance already exists for HPAI.
	AH3: Improve early detection and emergency response for HPAI, RP, ASF, FMD, PPR, CBPP, Rabies and ND.	RP has been eradicated from the country and HPAI is under control. ASF is targeted as the main disease to be eradicated. Regional strategy needs to be developed in collaboration with neighbouring countries.
	AH4: Control of CBPP and PPR through mass vaccination of susceptible population and ND (vaccination in around 25% of the free-range birds).	Existing strategy documents for the control of CBPP, PPR and ND need to be revised.
	AH5: Progressive eradication of ASF in a specific area.	
Technical priorities in **Veterinary Public Health (VPH)**	VPH1: Improvement of slaughterhouses management and inspection.	Standards for large abattoirs exist and public-private partnership is already developed for the management of the Lagos abattoir. Even if it is not directly the mandate of the VS, support is needed to develop standards for different kinds of abattoirs and to finance investment in infrastructure.

	VPH2: Improvement of the quality, distribution and use of veterinary drugs.	NAFDAC has a mandate to regulate registration and distribution of drugs including veterinary medicines in Nigeria. According to OIE standards, VS must be deeply involved in the administrative and field control of the veterinary medicines and biologicals. It therefore seems necessary to establish a strong coordination between NAFDAC and FDL on this matter.
Policy on organisational structure and management of **Veterinary Services (VS)**	VS1: Strengthening the chain of command and coordination capacities. VS2: Improving data collection and decision management.	Although the three levels of government (federal, state and LGAs) have responsibilities in VS' administration, there is a need to establish a functional chain of command and to improve coordination. Nigerian VS have to establish a functional Veterinary Services Information Management System (VSIMS) compatible with the relevant information systems at regional and international levels.

II.2 Level of advancement

The experts and the FDL team worked together, taking into account the national priorities and the current levels of advancement, to systematically establish the expected level of advancement for each of the 46 critical competencies over the next five years as indicated in table 4.

Table 4. Levels of advancement

Critical competencies	Level of advancement		National priorities				Comments Key activities
	current	expected	Organisational structure of VS	Livestock development	Animal health	VPH	
Chapter I:Human, physical and financial resources							
I.1. Professional and technical staffing of Veterinary Services							
I.1.A. Veterinarians and other professionals	NA[3]	3	X	X	X	X	The situation of human resources needs to be assessed in order to design a prospective plan to adapt the human resources to all the VS missions.
I.1.B. Veterinary para-professionals and other technical staff	NA	4	X	X	X	X	The registration of Veterinary Para-Professionals and their supervision need to be addressed by the VCN.
I.2. Competencies of veterinarians and veterinary para-professionals							
I.2.A. Professional competencies of veterinarians	3	3	X	X	X	X	The priority is to increase the links between the FDL and the Veterinary faculties and the relevant institutions in order to design appropriate curriculum and carry out research adapted by the country.
I.2.B. Competencies of veterinary para-professionals	3	3	X	X	X	X	The collaboration between NBTE and VCN must be strengthened to define the curriculum of Veterinary Para-Professionals and to promote accreditation of training as technician on animal health and VPH
I.3. Continuing education (CE)	3	4	X	X	X	X	CE to be extended to state, LGA and private vets
I.4. Technical independence	3	3	X				Consolidation of level 3
I.5. Stability of structures and sustainability of policies	4	4	X	X	X	X	Consolidation of level 4
I.6. Coordination capability of Veterinary Services							
I.6.A. Internal coordination (chain of command)	3	4	X	X	X	X	Strengthen FDL & DVS staff
I.6.B. External coordination		3	X	X		X	Formal coordination to be developed between FDL and NAFDAC, NAQS, VCN etc.
I.7. Physical resources	NA	4	X	X	X	X	Commitment at federal & state level required
I.8. Operational funding	2	4	X	X	X	X	Commitment at federal and state level required
I.9. Emergency funding	2	3	X		X	X	Procedure ensuring a rapid mobilisation of funds from NEMA or from the Ecological Fund
I.10. Capital investment	2	3	X	X	X	X	Commitment at federal and state level required
I.11. Management of resources and operations	NA	3	X	X	X	X	Functional Veterinary Services Information Management System (VSIMS) needs to be established.

[3] NA: No assessed during OIE PVS in 2007.

Chapter 2. Technical authority and capability							
II.1 Veterinary laboratory diagnosis	3	4			X	X	The priority is to strengthen the network of laboratories (public and private) involved in animal health and food safety testing.
II.2 Laboratory quality assurance	NA	2			X	X	NVRI central laboratory and the laboratory of NAFDAC have started developing a QMS in order to be accredited by an international accreditation body.
II.3 Risk analysis	2	3	X		X	X	VSIMS to be established and risk analysis capacities strengthened at NADIS, NAQS, NAFDAC etc.
II.4 Quarantine and border security	2	3			X		Priority is to assess the organisation of the border posts to optimize the services and determine human and physical resources needed
II.5 Epidemiological surveillance							
II.5.A. Passive epidemiological surveillance	3	4			X		The existing field network needs to be strengthened. Appropriate procedures defined for notification, diagnosis through a functional chain of command.
II.5.B. Active epidemiological surveillance		4			X		Active surveillance for HPAI is in place
II.6 Early detection and emergency response	3	3			X		Consolidation of the current level
II.7 Disease prevention, control and eradication	NA	3			X		Control of CBPP, PPR and ND through mass vaccination. Progressive eradication of ASF
II.8 Food safety							
II.8.A. Ante and post mortem inspection	NA	3			X	X	The priority is to update the regulation (Abattoirs Act) to enforce ante and post mortem inspection and introduce hygiene and safety requirements.
II.8.B. Inspection of collection, processing and distribution	NA	3				X	Actions aim to develop poultry exports and national dairy production
II.9 Veterinary medicines and biologicals	2	3	X			X	The VS must be deeply involved in the administrative and field control of the veterinary medicines and biologicals
II.10 Residue testing	NA	3				X	Priority given to the testing of antibiotics residues and antiparasites
II.11 Emerging issues	2	3	X	X	X	X	No specific action required
II.12 Technical innovation	1	2			X	X	Use of relevant websites, subscription to scientific publications and strengthen database.
II.13 Identification and traceability							
II.13.A. Animal identification and movement control	2	3		X	X		Design a study to determine the objectives for identification and for movement control
II.13.B. Identification and traceability of products of animal origin		(3)[4]			X		No priority action defined. However the situation should be assessed on year 4 or 5 to decide on the feasibility of tracing some relevant animal products.
II.14 Animal welfare	NA[5]	1					No targeted level has been determined during the next five years. The priority will be to introduce some relevant standards on animal welfare in the legislation
Chapter 3. Interaction with stakeholders							
III.1 Communications	3	4	X	X	X	X	Take into account the experience acquired with AI projects
III.2 Consultation with stakeholders	2	3		X	X	X	Carry out an inventory of the relevant organisations of stakeholders and formalise consultations.
III.3 Official representation	2	3	X				Establish the list of relevant meetings to be attended by VS and allocate accordingly the necessary budget

[4] The score will be assessed during the year 4 and 5.
[5] NA: No assessed during OIE PVS in 2007.

III.4 Accreditation / authorisation / delegation	2	4	X		X	X	Evaluate the pilot programme of "Sanitary Mandate" and update the legislative & regulatory frameworks accordingly.
III.5 Veterinary Statutory Body							
II.5.A. VSB authority	4	4	X		X	X	Ensure effective regulation by VCN in the relevant sectors of veterinary profession at federal, state and local levels including registration of veterinary para-professionals
II.5.B. VSB capacity		5	X		X	X	Strengthen the staff of the VCN Registry
III.6 Participation of producers and stakeholders in joint programmes	2	4			X	X	Regulation framework for implementation and monitoring of the joint programme to be developed
Chapter 4. Access to markets							
IV.1 Preparation of legislation and regulations	3	4	X		X	X	OIE Mission on legislation required
IV.2 Implementation of legislation and regulation; and stakeholder compliance	1	3	X		X	X	Definition of inspection methods for each domain with relevant training of inspectors
IV.3 International harmonisation	2	5	X	X	X		Improve theparticipation of FDL in relevant meetings of OIE, Codex Alimentarius etc
IV.4 International certification	2	4	X	X	X		VS are probably already at level 4. The objective will be to consolidate this level
IV.5 Equivalence and other types of sanitary agreements	2	3		X	X		Nigeria could export some animals and animal products: poultry and pigs to neighbouring countries. Therefore, consultations for trade agreement should be developed.
IV.6 Transparency	3	5	X		X		Regular audits carried out to verify efficiency & effectiveness of procedures
IV.7 Zoning	1	2		X	X		Zoning is not a short-term priority. However, a zoning system could be tested in the strategy against ASF in pilot area
IV.8 Compartmentalisation	2	4		X	X		Creation of a compartment with poultry intensive farms, or pig intensive farms, or fish farms could facilitate exports to neighbouring countries.

II.3 Impact and significance

Nigeria has the potential to diversify its economy, which is currently primarily dependent on the oil and gas sector, by developing the livestock sector. The strengthening of VS in Nigeria will have a positive and significant impact on:

- Accelerated growth in livestock products in order to achieve self-sufficiency;
- Enhancing the ability of the country to export animal products, (mainly poultry), to neighbouring countries;
- Minimizing the threat posed to animals and humans by TADs and zoonoses and the associated costs in controlling such TADs and zoonoses;
- Protecting public health in particular by reducing zoonoses, food borne diseases etc;
- Establishing adequate policies and regulatory frameworks which are conducive to an environment in which the private sector can thrive and develop partnerships with the public sector;
- Establishing an effective Veterinary Services Information Management System facilitating the sharing of information with other countries in Africa and beyond, as well as the improvement in Nigeria's capacity to participate in international trade

PVS GAP ANALYSIS PLAN

I Strengthening competencies for international trade

The purpose of this section is to explain the proposed activities in the field of international trade development, for both imports and exports.

This will include the activities presented in Critical Competency Cards II.4, II.13, IV.4, IV.5, IV.6, IV.7 and IV.8. If necessary, links could be made with the important cross-cutting competencies dealt with in the 5th pillar on management of Veterinary Services (e.g. chapter V.2 of the report) in the 2nd pillar on animal health or in the 3rd pillar on Veterinary Public Health.

I.1 Strategy and activities

The quarantine and border security procedures are defined in the Animal Disease (control) Act n* 10 of 1988. Certification procedures for animals and animal products are under the responsibility of the FDL. Since the OIE PVS Evaluation mission, some progress has been made in order to develop certification procedures in compliance with international standards.

Trade in animals relates mainly to importing cattle from Cameroon, Chad, Central African Republic, Sudan and Niger. The number of cattle imported has not been determined. However, illegal importation of animals remains high.

Since 2007, Nigeria Agriculture Quarantine Services (NAQS) has been established including the previous National Veterinary Quarantine Service (NVQS), the Plant Quarantine Service (PQS) and the Fisheries Quarantine Service (FQS). The veterinary quarantine staff is limited (100 agents including 31 veterinarians).There are no quarantine facilities in the country, however, one is currently under construction in Kano. The veterinary border post network includes 11 terrestrial border posts, 4 airport border posts and 4 seaport border posts which is not adequately equipped.

VS do not assess the risks of introduction of new diseases into the country based on scientific risk analysis. All personnel stationed at border points are not trained in risk analysis.

As a member of ECOWAS, Nigeria is participating in the common market through the liberalisation of trade and the establishment of an economic union. Formal and non-formal sanitary agreements exist with some countries such as Cameroon and Chad allowing the circulation of animal and animal products.

With regard to identification and traceability, VS can document the history of some animals and animal products but have no procedure in place to identify and trace animals and animal products as required for disease control and food safety purposes.

Disease free zones have not yet been established. No compartmentalisation strategy framework is available although some industrial poultry farms implement appropriate biosecurity measures that enable them to establish and maintain disease free compartments.

The proposed strategy for the next five years is based on:

- The reorganisation and strengthening of the veterinary border posts in Nigeria;
- A strengthening of the identification and traceability of imported animals and movements between states;
- The analysis of the opportunity to develop compartmentalisation strategy, to develop exportation of poultry and pig products to neighbouring countries.

I.1.A Reorganisation and strengthening of the veterinary border posts in Nigeria

With the creation of NAQS, it is essential to sufficiently adapt the control at border posts to account for the import trade flow into Nigeria. During the mission, it was not possible to receive precise data on the number of consignments for imported animal products or imported live animals.

This is the reason why VS have to carry out a preliminary study of the border posts organisation in order to optimize the services and determine human and physical

resources. The study must analyse the movement of animals (per day, per week, per month, per year, per border post) and the way in which it can be concentrated in a few number of entry points to the country. This study must analyse and define the coordination procedures between:

- customs services and NAQS to confirm that any animal products and any live animals may be introduced in the country without NAQS authorisation ,
- the NAQS and local VS when they are involved in border inspection,
- NAQS and NAFDAC concerning the importation of veterinary drugs and food from animal origin.

Following the results of this study, the country will invest in facilities and will recruit the necessary staff.

Other key activities to be implemented include:

i. Organisation of study tours to learn from experiences in other countries. It would be interesting to analyse the organisation of the border control in a federal country or a federal interstate community.
ii. Audit of certification procedures for importation and inspection at border posts and updating the legislation if needed. Certification procedures exist and have been improved.
iii. Training of the operational staff for all new operational procedures.

There is also a need to establish **a database on border posts** in order to facilitate monitoring their activities. It could be linked with the project on electronic certificates for imports. During the conception of this database, the interface and compatibility with the custom's database must be analysed to improve the control of the import of live animals and animal products.

The issue of illegal activities needs to be addressed in consultation and collaboration with neighbouring countries in order to define the appropriate strategy to reduce illegal importations and to better monitor the exchange of animals. Close cooperation with border posts between the countries should be developed.

I.1.B Improvement of animal identification and traceability of movements

Concerning animal identification and traceability, the short term objective is to improve information on animal origin from other countries and to strengthen the control over animal movement. Given the importance of the identification of live animals, we recommend organizing a pilot phase incorporating:

- undertaking a preliminary study to determine the objectives for identification and movement control,
- a strong consultation with stakeholders to ensure their involvement in such an initiative.
- the implementation and evaluation of a pilot phase before rolling out the initiative over the rest of the country.

Two particular cases have to be assessed:

- The question of the control over pig movement also must be addressed in the area in which the eradication of ASF will begin (see part II on animal health competencies).
- For some commercial farms, individual identification may be performed. This may be valuable for sanitary certification of breeding animals with a high genetic value..

With regard to animal products, the priority actions have been defined. It was planned to carry out a study on year 4 or 5 to assess the situation and understand the feasibility of tracing certain animal products. The study must be focused on the sector in which the benefits of traceability could be significant for commercial or sanitary issues including animal health. The study will be carried out by the FDL in collaboration with NAFDAC.

I.1.C Analysis on a compartmentalisation strategy to develop exports

Nigeria could export some animals and animal products: poultry and pigs to neighbouring countries (Benin or Cameroun). The consultations on trade agreements should focus their priorities on these countries. Furthermore, the possibility to export live animals must ensure safer animal movement and reduce illegal trade.

Taking into account the situation in Nigeria, zoning is not in the short-term, a priority. Zoning requires the development of animal identification and animal movement traceability. However, a zoning system could be tested as part of the strategy against ASF in a pilot area. This strategy requires identifying the subpopulation free of ASF in the area concerned.

Nigeria may have the opportunity to export poultry and pork to neighbouring countries. The **creation of compartments** with poultry or pig intensive farms, or fish farms could facilitate exports. The main actions required include:

i. Identifying the targeted farms interested in the development of exports;
ii. Performing a cost-benefit analysis with the concerned stakeholders in order to verify if the cost of compartmentalisation is compatible with the expected market;
iii. Developing an animal identification system capable of tracing live animals and by products in order to provide confidence to importing countries;
iv. Strengthening biosecurity measures within the compartments.

I.2 Human resources

Concerning the main veterinary border posts, a first approach has carried out with NAQS and FDL. It has been based on the statistics supplied by the NAQS and the data from FAOSTAT (Tradestat). **This estimation must be validated or revised with the study of the organisation system**.

The data below are based on a prudent hypothesis. The staff required is estimated at 31 veterinarians, 10 staff with other university degrees and 55 veterinary paraprofessionals. They are more or less currently in place, but it is important to define for each category its mission and optimize organisation to facilitate more efficient border post control.

The implementation of the pilot phase on the animal identification programme requires 3 veterinarians, 1 staff with another university degree, 80 veterinary paraprofessionals and 5 support staff.

In total, the staff involved in this pilar (border posts and animal identification)is 34 veterinarians, 11 staff with other university degrees, 135 veterinary paraprofessionals and 5 support staff.

I.3 Physical resources

The main investments required include the building of quarantine facilities, renovation of the main border points and acquisition of incinerators. **The appropriate needs of investments will be assessed through the proposed study.** Based on the estimation carried out by NAQS and FDL, the buildings to be maintained represent 1,295m2, including the needs for the pilot phase of the animal identification programme

Transport requirements at border posts and for the pilot phase fo animal identification are estimated at 12 cars and 16 4X4 vehicles. Other physical resources include telecommunication (48), office equipment (88) and equipment for border posts (79 K USD)).

I.4 Financial resources

The total annual budget to strengthen competencies for international trade is around: 14.1 M USD per year including:

- 12.1 M USD for consumable expenses. The main expenses concern earth tags and identification systems.
- 1.5 M USD for salaries.
- 0.338 M USD for material investments.
- 0,151 M USD for continuing education.

An exceptional budget (921 K USD) over the five years is required mainly to invest in border posts and studies. This budget must be updated with the results of the proposed study.

Table 5. Sub-Total for Strengthening Competencies for International Trade

SUB-TOTAL TRADE						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		1295				
Existing building to be maintained (m2)		1295	4	1	5 180	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars		12	23 333	5	56 000	
Number of 4x4 vehicles		16	40 000	5	128 000	
boats						
Telecommunication equipment set		48	1 200	5	11 520	
Office equipment set		88	2 000	3	58 667	
Other specific equipment						
Other specific equipment for trade (1)					79 167	554 167
Other specific equipment for trade (2)						
Sub-total Material investments					**338 533**	**554 167**
Non material expenditure						
Training						
Specialised training (man-months / 5 year)	-	-	5 000			
Continuing education (man-days / year)	-	1 045,0	144		150 944	
National expertise (days/5 years)		580,0	350			203 000
International expertise (weeks/5 years)		16,0	10 250			164 000
Special funds (/ 5 years) for …		-				
Sub-total non material expenditure					**150 944**	**367 000**
Salaries / year						
Veterinarians	31,0	34,0	15 000		510 000	
Other university degree	10,0	11,0	10 000		110 000	
Veterinary para-professionals	55,0	135,0	6 000		810 000	
Support staff	-	5,0	3 000		15 000	
Sub-total Salaries					**1 445 000**	
Consumable resources / year						
Administration			20%		289 000	
Travel allowances						
staff within the country (man-days) / year	-	400	80		32 000	
drivers within the country (man-days) / year	-	-	67			
staff abroad (man-weeks) / year	-	8	3 600		28 800	
Transport fees						
Km or miles Motorbikes / year	-	-	0,04			
Km or miles cars / year	-	240 000	0,07		16 640	
Km or miles 4x4 vehicle / year	-	400 000	0,13		52 000	
km or miles boats / year	-	-	0,05			
km or miles / year	-	-				
Specific costs						
Targeted specific communication	-	3			11 000	
Consultation (number of 1 day meetings)		49			89 500	
Kits / reagents / vaccines	-	-				
Other costs for trade (1)	-	11 500 020			11 567 000	
Other costs for trade (2)	-	1 001			45 000	
Sub-total Consumable resources					**12 130 940**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***14 065 418***	***921 167***
Total in	***NGN***				***2 109 812 667***	***138 175 000***

II Strengthening competencies for animal health

The purpose of this section is to explain the activities proposed in the field of animal health.

These activities are chiefly those presented in the "Critical Competency Cards" "II.5 Epidemiological surveillance"; "II.6 Early detection and emergency response (EDER)"; "II.7 Disease prevention, control and eradication" and "II.14 Animal welfare".

"Strengthening of competencies for animal health" has also the objective of improving or upgrading the field veterinary network.

II.1 Strategy and activities

II.1.A Strategy for priority diseases

The strategy for the national priority diseases listed below has been discussed during the "OIE PVS Gap Analysis" mission taking into consideration the impact on livestock production system or on public health.

CBPP and PPR

These diseases have a huge economic impact on Nigeria. The level of vaccination is very different from one state to another one. The main objective is to control the disease through mass vaccination i.e. vaccinate 80% of the susceptible population in the country. Concerning the imported live animals, a strategy must be defined with neighbouring countries (vaccination in the country of origin, vaccination at the entrance of the country, direct transport for slaughtering if it is required).

At the same time, passive surveillance must be strengthened in order to identify outbreaks, confirm and notify them. It will be important to measure the impact of the vaccination on these diseases.

African swine fever (ASF)

It is one of the most problematic diseases in West Africa. Nigeria has the potential to develop pig production in the south of the country. However, this disease will be a huge hindrance for any investor in pig production.

Regardless of the difficulties encountered in eradicating the disease, Nigeria may be one of the countries in the region capable of initiating an eradication strategy.

The strategy may involve choosing a targeted area (e.g. one state or several), defining a relevant programme against ASF with the participation and collaboration of motivated stakeholders interested in the development of pig production.

- The first step will be a cost-benefit study to define the best strategy;
- The second step would be to define and implement efficient biosafety measures adapted to each production system;
- The third step will be to identify the farms with contaminated animals through mainly passive surveillance and some active surveillance. An emergency plan for rapid response would be defined and implemented;
- The fourth step could involve active surveillance to verify the absence of the circulating virus;
- An emergency plan must be defined in the case of ASF detection in the free zone.

Step by step, the area could be extended. Passive surveillance could be improved all over the country.

One key question concerning this strategy will be the identification of animals and the traceability of animal movement in the zone in which the eradication programme is being implemented.

Such programmes could also create a political issue in Nigeria. Donors will probably be ready to invest in an eradication plan. It will involve a very different population of farmers to that of CBPP and PPR programmes.

Tuberculosis and brucellosis

The main problem concerning these zoonoses is the lack of knowledge on their real prevalence in Nigeria. A programme on TB is in progress with diagnosis both on humans and animals.

The main objective of this programme may be to improve the accuracy of the estimate of the prevalence of these diseases, in order to be able to subsequently define an appropriate strategy to control them.

Passive surveillance for tuberculosis could be improved in slaughterhouses by strengthening the notification procedures of suspicious cases. A procedure could be defined to confirm the case suspected in the abattoir and to identify the origin of the case. Some targeted active surveillance could be developed on some specific population with a higher risk of human contamination (dairy cattle), or in an area with a higher prevalence of human cases.

Passive surveillance for brucellosis is difficult if a differential diagnosis after abortion cannot be obtained. Active surveillance could be concentrated on dairy cattle by testing raw milk or serum samples. Where there are positive samples, it may be possible to identify those animals which have tested positive for brucellosis. This programme could be included among the actions to improve food safety in the dairy sector (see III.1.A).

FMD

The disease is present in the country and the economic impact is not very well known. Mass vaccination is difficult to implement.

The main objective is to improve the management of the outbreaks: better notification of outbreaks, detected by passive surveillance, contingency plan and ring vaccination to control the disease. This strategy will significantly reduce the impact of the disease. The other objective must be a better identification of the strains circulating in the country.

Newcastle disease (ND)

The development of a strategy to control ND in commercial farms provides a good opportunity to maintain efficient surveillance on poultry flocks.

The objective is to totally control the disease in commercial farms with efficient systematic vaccination. It may be possible to control the disease through efficient biosecurity measures. The control of the disease is more difficult for free range birds. The strategy may be to intensify the vaccination programme in the area with a high prevalence of the disease. This means improving passive surveillance and having the objective of vaccinating approximately 25% of the chicken population.

The strategy for vaccination must be carefully analysed in terms of distributing vaccines and vaccinating at lower costs. Distribution of vaccines is dependent on the veterinary network. Vaccination in villages may be managed through poultry producer associations.

HPAI and Rinder Pest

The objective is to maintain the status of Nigeria regarding these diseases. The contingency plan must be regularly updated and tested to ensure control in an emergency outbreak situation.

Rabies

Due to lethality of the disease, the objective is to increase the efficiency of the passive surveillance on animals and the efficiency of the contingency plan in case of suspicious animal bites. This will allow to promote vaccination programmes and to concentrate these vaccinations in high risk areas.

In conclusion:

Passive surveillance (II.5A) needs to be strengthened for diseases such as:

- CBPP, PPR, Brucellosis, Tuberculosis, NCD, and ASF due to their endemicity;
- FMD due to its morbidity,

- Rabies due to its lethality.

The FMD and rabies budget is provided on the Cost Estimation Card II.6 (Early detection and emergency response).

The main obstacle concerning the "passive surveillance critical competency" is the absence of material (e.g.: leaflets) aimed at all stakeholder sectors which should provide assistance in detecting these endemic diseases which are considered national priorities. It is necessary to prepare educational material and training on case definitions, procedures for diagnosis of suspicious cases and procedures for confirmation of cases (e.g.: how to collect the sample, send it and report data/information) or notification the veterinary authority when appropriate.

Active surveillance (II.5B) must be strengthened for brucellosis and tuberculosis in order to implement a project to assess the prevalence of the diseases at regional/state level. For ASF, active surveillance is necessary to follow up, monitor and evaluate the animal health strategy used by veterinary services.

It is also important that the field veterinary network responsible for active surveillance has access to information/data collected by the VPH staff involved in veterinary inspection during the slaughter process, in order to monitor the livestock producing system at local level, farm, premise, cluster or epidemiological unit when appropriate.

Strengthening early detection and emergency response for CBPP, FMD, rinderpest, PPR, HPAI, ASF and NCD is required. The main obstacle regarding this critical competency is to keep all field veterinarians up to date and trained in early detection and emergency response procedures for these diseases. Before achieving this goal, it is necessary to regularly define/update the emergency plan considering most recent scientific advancements.

Regarding the critical competency II.7 (disease prevention, control and eradication), the priorities will be mass vaccination against CBPP and PPR, a vaccination programme against ND and the definition of an eradication programme against ASF in some states.

II.1.BField veterinary network

One of the main obstacles concerning the animal health pillar is gathering timely information on animal population and animal health from all 37 federal units of the country. This gap is due to an operational break on the veterinary epidemiological surveillance stages:

- Stage 1: Data collection;
- Stage 2: Data transmission;
- Stage 3: Data processing;
- Stage 4: Decision making on the results of analysis

It is imperative to have a "data management system" or an "information system" that enables the collection, transmission and processing of data, and the production of information to substantiate decision making based on different administrative perspectives/levels: local, state/zone and federal (see V.2.C).

The field veterinary network must also be able to develop mass vaccination and all animal health programmes. The network could involve both public and private veterinarians.

It is possible to estimate the resources to cover the Nigerian territory.

Step A: Estimation of the number of Veterinary Livestock Units (VLU)

Taking into account the animal census in Nigeria, we can estimate that **Nigeria has roughly 34,000,000 VLUs**.

Table 6 provides an estimation of the VLU.

Table 6. Number of VLUs in Nigeria

States	Number of animals						Equivalent number of VLU
	Bovines	Small Ruminants	Porcines	Equines, Asines, Camelides (*)	Poultry	Others	
value of VLU	1,00	0,10	0,30	0,30	0,01		a = (value of VLUs * Number of Animals)
ABIA	4 484	1 420 464	20 724		1 631 544		169 063
ADAMAWA	868 970	4 454 127	504 287		4 777 851		1 513 447
A/IBOM	6 097	3 522 575	179 609		3 530 559		447 542
ANAMBRA	35 064	2 544 732	62 172		3 162 793		339 817
BAUCHI	1 143 381	8 073 901	65626,32825		13 519 620		2 105 655
BAYELSA	1 371	1 216 109	53 878		1 147 432		150 619
BENUE	125 013	6 567 386	1 063 837		7 796 652		1 178 869
BORNO	887 376	7 209 782	75 988		6 766 906		1 698 820
C/RIVER	10 671	1 213 195	138 149		1 471 066		188 146
DELTA	21 342	2 617 462	146 450		3 000 976		357 033
EDO	30 486	1 948 070	219 675		1 426 934		305 465
EBONYI	102 127	3 167 650	20 724		6 818 234		493 291
EKITI	7 625	2 815 802	262 505		3 383 453		401 792
ENUGU	25 912	1 904 880	46 284		4 310 216		273 387
GOMBE	1 067 004	638 005	6 563		588 427		1 138 657
IMO	82 352	8 073 901	34 540		7 428 886		974 393
JIGAWA	533 502	6 478 499			5 590 052		1 237 252
KADUNA	1 097 490	2 810 383	504 287		3 265 767		1 562 472
KANO	579 231	3 956 944			4 459 328		1 019 518
KATSINA	685 931	7 000 275			6 031 372		1 446 272
KEBBI	780 440	9 671 889	3 454		8 826 399		1 836 929
KOGI	195 106	5 142 260	400 666		4 266 093		872 193
KWARA	457 287	3 503 792	124 345		3 868 905		883 659
LAGOS	4 574	3 818 771	50 429		3 633 534		437 915
NASARAWA	521 311	593 706	490 470		676 691		734 589
NIGER	1 280 405	3 318 939	158 885		3 530 559		1 695 270
OGUN	30 486	4 415 124	303 954		4 118 986		604 374
ONDO	7 625	3 256 124	324 678		3 824 773		468 889
OSUN	115 848	3 432 581	161 648		4 118 986		548 790
OYO	141 760	3 244 690	197 570		3 604 113		561 541
PLATEAU	637 151	3 955 815	594 091		4 398 489		1 254 944
RIVERS	7 625	4 097 765	80 133		4 413 199		485 574
SOKOTO	585 326	1 824 759	1 865		1 706 437		785 426
TARABA	914 650	3 813 556	462 838		3 133 372		1 466 191
YOBE	1 493 805	4 064 715	75 988		3 971 879		1 962 792
ZAMFARA	585 326	7 209 782	1 865		6 766 906		1 374 533
FCT	165 522	4 647 582	34 540		4 413 199		684 774
Total	**15 239 674**	**147 645 993**	**6 872 718**	**1 276 630**	**159 380 586**		**34 042 884**

Source: FDL, except (*) for which data are coming from FAOSTAT

Step B - Estimation of minimum number of Field Veterinary Posts to undertake official activities

In Table 7, the different animal health programmes are listed and the number of working days for a veterinarian is estimated.

- For brucellosis, the objective is to carry out approximately 9,000 samples (the sampling will be limited to the dairy farms after positive results on the raw milk from the tank). It is possible to do approximately 50 samples per day, because these samples will only be carried out in suspicious herds. Therefore, 180 working days are required.
- Vaccination against CBPP will concern 80% of cattle twice year (24 million vaccinations every year). It is possible to vaccinate around 500 cattles per day.
- Vaccination against PPR involves small ruminants with around 1,000 animals being vaccinated per day, and one vaccination campaign per year.
- Some actions have been planned for FMD to manage outbreaks by using ring vaccination and organising some active surveillance in some states.
- Other actions have been planned for inquiry after tuberculosis cases in abattoirs, for

training or extension programmes in villages (ND, brucellosis...).

Table 7. Estimation of minimum number of Field Veterinary Posts to undertake official activities

Number of working days necessary to undertake all official activities related to individual animals					
Campaign or dates (duration)	**Activity**	**Species**	**Targeted number of animals** b	**Average animals per day** c	**Total number of days** d= (b/c)
Oct-Nov (60 days)	Active surveillance for brucellosis	bovines	9 000	50	180
Oct-Nov (60 d) and April-May (60 d)	Vaccination against CBPP + other voluntary vaccines (anthrax, treatment)	bovines	24 383 479	500	48 767
Nov-Dec (60 days)	Vaccination against PPR + other voluntary vaccines (anthrax, treatment)	small ruminants	118 116 794	1 000	118 117
Sept-Dec (60 d) and April-May (60 d)	Identification of animals and records of the number of animals / herd	bovines & small rmts	11 500 000	1 150	10 000
All year	FMD (ring vaccination and vaccination of large farms)	ruminants	10 000	1 000	10
All year	Active surveillance for ASF	porcines	3 000	100	30
					177 104

Number of working days necessary for official visit of sites (food inspection, village training, farm surveys...)					
Campaign or dates (duration)	**Activity**	**Type of site to visit**	**Number of visits per year** e	**Number of days per visit** f	**Total number of days** g= (e*f)
all year	Inquiry after tuberculosis identified in abattoirs		750	1	750
all year	Information and training in 25% of localities		17750	0,5	8875
					9 625

Total number of working days necessary to implement all official activities	h = (d+g)	186729
Number of working days available yearly to undertake official activities	i	130
Minimum number of Field Veterinary Posts (with 1 vet)	j = (h/i)	1 436
Maximum number of VLU per Field Veterinary Post	k = (a/j)	23 701

The total working days required for these actions is around 186,000. Taking into account that some of these activities must be concentrated during a few months and that field veterinarians have to supply other services, we can estimate that 1,400 field veterinary posts are required in Nigeria. A field veterinary post (FVP) is a post with a veterinarian and 2 assistants in charge of field activities (animal care, vaccination campaigns...). It could be a private clinic or a public post.

Step C - Estimation of accessibility of the Field Veterinary Network

In this step, we have estimated the number of FVP required for each state taking into account the number of VLUs:

- The density of a VLU (p: Number of VLU/km2) is a good indicator of the economic and geographical difficulties involved in creating a FVP in each state. When the density is very low, as in Cross River State, it will be more difficult to achieve a sustainable number of FVP.
- The problem of density is also illustratred through the accessibility (r) per state. We estimate the minimum number of FVP needed for the State by the number of VLUs divided by the maximum number of VLU per FVP. The average area of each FVP is

the total area of the State divided by the minimum number of FVP. r is an estimate of the radius of the average area of each FVP. It is an estimate of the distance that a veterinarian has to travel from his office to the farms, if the office is in the centre of this circle.

- The minimum number of FVP is estimated by taking the number of VLU in the state and dividing it by the maximum number of VLUs estimated per FVP estimated in Table 7.
- The actual number of FVP is determined by the number of veterinarians involved in field activities in the 2007 register of the VCN.

Table 8. Estimation of the number of FVP needed per state

Administrative level	Area in Km2	Number of VLU	Number of VLU / Km2	Accessibility to minimum number of FVPs (km)	Minimum number of FVPs*	Actual number of FVPs*
	l	m = (a)	p = m/l	r = racine((0,5*l)/q)	q = (m/k)	s
ABIA	6 320	169 063	26,75	21	7	10
ADAMAWA	36 917	1 513 447	41,0	17	64	32
A/IBOM	7 081	447 542	63,2	14	19	8
ANAMBRA	4 844	339 817	70,2	13	14	9
BAUCHI	45 837	2 105 655	45,9	16	89	18
BAYELSA	10 773	150 619	14,0	29	6	6
BENUE	34 059	1 178 869	34,6	19	50	12
BORNO	70 898	1 698 820	24,0	22	72	62
C/RIVER	20 156	188 146	9,3	36	8	6
DELTA	17 698	357 033	20,2	24	15	17
EDO	5 670	305 465	53,9	15	13	9
EBONYI	17 802	493 291	27,7	21	21	3
EKITI	6 353	401 792	63,2	14	17	10
ENUGU	7 161	273 387	38,2	18	12	10
GOMBE	18 768	1 138 657	60,7	14	48	14
IMO	5 100	974 393	191,1	8	41	9
JIGAWA	23 154	1 237 252	53,4	15	52	12
KADUNA	46 053	1 562 472	33,9	19	66	18
KANO	20 131	1 019 518	50,6	15	43	26
KATSINA	24 192	1 446 272	59,8	14	61	15
KEBBI	36 800	1 836 929	49,9	15	78	25
KOGI	29 833	872 193	29,2	20	37	9
KWARA	36 825	883 659	24,0	22	37	15
LAGOS	3 345	437 915	130,9	10	18	24
NASARAWA	27 363	734 589	26,8	21	31	15
NIGER	76 363	1 695 270	22,2	23	72	24
OGUN	16 672	604 374	36,3	18	26	14
ONDO	15 500	468 889	30,3	20	20	12
OSUN	9 251	548 790	59,3	14	23	9
OYO	28 454	561 541	19,7	25	24	33
PLATEAU	30 913	1 254 944	40,6	17	53	10
RIVERS	11 077	485 574	43,8	16	20	2
SOKOTO	25 973	785 426	30,2	20	33	27
TARABA	54 473	1 466 191	26,9	21	62	54
YOBE	45 502	1 962 792	43,1	17	83	60
ZAMFARA	39 762	1 374 533	34,6	19	58	30
FCT	7 315	684 774	93,6	11	29	14
Total	**924 388**	**33 659 895**	**36,4**	**18**	**1420**	**683**

Source: FDL, VCN

Even if there are some mistakes in the estimation of the actual number of FVP, it is possible to identify 3 groups of states:

- A first group with an actual number of FVP representing at least 80% of the minimum required: ABIA, BAYELSA,BORNO, DELTA, ENUGU, LAGOS, OYO, SOKOTO, TARABA, YOBE;
- A second group with a deficit of FVP (50 to 80% of the minimum FVP required): ADAMAWA, ANAMBRA, CROSS RIVER, EDO, KANO, ONDO, YOBE, ZAMFARA, FCT. These states are probably experiencing some difficulties in implementing all animal health programmes.
- In the third group, there are 19 states with less than 50% of the required FVP. This means that it is not possible to carry out all VS missions and establish a minimum level epidemiological surveillance in these states..

We note that there is a shortage of approximately 700 field veterinarians in the country.

Step D - Estimation of annual distances necessary to undertake official activities

Table 9 estimates the number of kilometres required for all animal health programmes and per FVP. This facilitates the estimation of the budget for transporting FVP

Table 9. Estimation of annual distances necessary to undertake official activities

Type of official activity		Type of site to visit	Number of visits per year	Average return distance FVP to site	Vehicles involved in the visit		Budget (Km)
					Type	Number	
		x	y = (d)	z	aa	ab	ac = (y*z*ab)
Official activities related to individual animals							
Oct-Nov (60 days)	Active surveillance for brucellosis		180	20	moto	1	3 600
Oct-Nov (60 d) and April-May (60	Vaccination against CBPP + other voluntary vaccines (anthrax, treatment)		48 767	20	moto	3,0	2 926 017
Nov-Dec (60 days)	Vaccination against PPR + other voluntary vaccines (anthrax, treatment)		118 117	20	moto	3,0	7 087 008
All year	FMD (ring vaccination and vaccination of large farms)		10	20	moto	3,0	600
All year	Active surveillance for ASF		30	20	moto	1,0	600
Official activities related to visiting sites			y = (e)				
all year	*Inquiry after tuberculosis identified in abattoirs*		750	20	moto	1	15 000
all year	*Information and training in 25% of localities*		17 750	20	moto	1	177 500
Total annual distance to be covered by the national field veterinary network						ad = total (ac)	**10 210 325**
National average distance per Field Veterinary Post						ae = (ad/s)	**14 949**

Step E - Estimation of human, physical and financial resources

Table 10 estimates the budget required for a FVP including:

- One veterinarian and two veterinary paraprofessionals;
- Renting or maintenance of buildings;
- Equipment (motorcycles, mobile, phone, office equipment, gaz fridge, small equipment);
- Travel expenses for 50,000 km per year.

30 000 USD are necessary to cover all these expenses for one FVP. Taking into account 250 to 300 working days per year, the cost for one working day is approximately 100 to 120 USD. For approximately 1,400 FVP, the required income is around 43 M USD.

Table 10. Estimation of human, physical and financial resources in a FVP

Budget line	Designation of units	Number of units af	Unit cost ag	Nb of years for amortisation ah	Annual cost per FVP ai = (af*ag/ah)	Total for field network
Human resources *(Full Time Equivalent)*					***22 400***	*staff* aj =(af*s)
Veterinarian	net income per year	1	14 400	-	14 400	683
Veterinary para-professional	net income per year	2	4 000	-	8 000	1366
Support staff	net income per year			-		
Physical resources					**1 733**	*units* ak = (af*s)
Buildings	m² to maintain	1	150	1	150	683
Transport	motorcycle	2	400	3	267	1366
Telecommunication set	mobile phone	2	1 000	3	667	1366
Office set		1	1 500	3	500	683
Cold chain	gaz fridge	1	1 000	10	100	683
Other Equipment	small technical equipment	1	500	10	50	683
Functioning					**6 480**	*amounts* al = (ai*s)
Transport fees	km	50 000	0,04	-	2 000	1 366 000
				-		
Administrative/social costs	lump sum % on net income	20%		-	4 480	3 059 840
Other				-		
				-		
Total cost of a Field Veterinary Post				am = total (ai)	**30 613**	
Total cost for Field Veterinary Network				an = (am*r)		**43 477 531**

Step F - Estimation of the budget for delegated activities.

Taking into account the 186 769 working days needed for official activities (see Table 7), the total budget required for official activities is approximately 19 to 22 M USD (186 769 days per 100 to 120 USD).

More or less, we can estimate that the current network in public VS (at LGA level or State level) represents circa 680 public veterinarians (FVP) in public clinics, so 48% of the required number of FVP.

If the Nigerian VS want to complete the public network with a network of private veterinarians, the budget required for delegated activities will be approximately 9 to 10.5 M USD per year (48% of 19 to 22 M USD). This is why we have estimated a budget of 9.5 M USD for delegated activities in CC II.7.

In conclusion:

To cover the Nigerian territory, approximately 1,400 FVP are required (with one veterinarian and 2 veterinary paraprofessionals).

Taking into account the current situation, the public FVPs (LGA or State) represent only 48% of the needs. It is therefore important to promote private veterinary clinics involved in rural activities and to develop delegated activities with private veterinary clinics.

The budget for delegated activities to private veterinary clinics is approximately 9.5 M USD.

The analysis of the situation per state has shown that in 50% of the states, the number of veterinarians is not sufficient to carry out the official activities and efficient passive surveillance. The FDL has to work closely with these state VS to support them in recruiting

veterinarians or promoting private clinics. It is essential to develop an efficient field veterinary network.

II.2 Human resources

Following the previous analysis of the field veterinary network for official activities, the human resources in public VS (LGA and State level) include around 680 veterinarians, 1360 veterinary paraprofessionals and 80 support staff.

These numbers do not include the 720 private FVP that will be involved in delegated activities.

II.3 Physical resources

The physical resources in Table 11 include only the requirements for public VS:

- Approximately 24,480 m2 of buildings;
- 2,040 motorcycles;
- 680 equipment sets and 1,360 office equipment sets;
- Small equipment for public clinics.

II.4 Financial resources

The global annual budget to strengthen competencies for animal health is approximately: 41.7 M USD per year including (Table 12):

- 11.8 M USD for consumable expenses. The main expenses concern vaccines (Table 11)
- 18.6 M USD for salaries
- 1.4 M USD for investments
- 11 K USD for continuing education
- 9.5 M USD for delegated activities

Table 11. Estimation of the Vaccine Budget

	Prices of vaccines in USD	Number of vaccines per year	Budget in USD per year
ND	0,01	200 000 000	1 333 333
CBPP	0,03	25 000 000	666 667
PPR	0,04	120 000 000	4 800 000
FMD	1	10 000	10 000
			6 810 000

An exceptional budget (15.007 M USD) over the five years is required:

- 15 M USD for emergency funds, especially for ASF eradication programmes. This amount must be assessed during the recommended cost-benefit study.
- 7 K USD for national expertise in order to carry out this study.

Table 12. Sub-Total for strengthening competencies for animal health

SUB-TOTAL ANIMAL HEALTH						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		24 480				
Existing building to be maintained (m2)	-	24 480	4	1	97 920	
Existing building to be renovated (m2)	-	-	40	10		
Building to be build (m2)		-	90	25		
Transport						
Number of motorbikes	-	2 040	400	3	272 000	
Number of cars	-	-	23 333	5		
Number of 4x4 vehicles	-	-	40 000	5		
boats	-	-				
	-	-				
Telecommunication equipment set	-	680	1 200	5	163 200	
Office equipment set	-	1 360	2 000	3	906 667	
Other specific equipment						
Other equipment for Animal Health (1)					6 800	
Other equipment for Animal Health (2)						
Sub-total Material investments					**1 446 587**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)	-	-	5 000			
Continuing education (man-days / year)	-	2 050,0	144		296 111	
National expertise (days/5 years)		50,0	350			17 500
International expertise (weeks/5 years)		-	10 250			
Special funds (/ 5 years) for …		1				15 000 000
Sub-total non material expenditure					**296 111**	**15 017 500**
Salaries / year						
Veterinarians	-	680,0	15 000		10 200 000	
Other university degree	-	-	10 000			
Veterinary para-professionals	-	1 360,0	6 000		8 160 000	
Support staff	-	80,0	3 000		240 000	
Sub-total Salaries					**18 600 000**	
Consumable resources / year						
Administration			20%		3 720 000	
Travel allowances						
staff within the country (man-days) / year	-	1 000	80		80 000	
drivers within the country (man-days) / year	-	-	67			
staff abroad (man-weeks) / year	-	-	3 600			
Transport fees						
Km or miles Motorbikes / year		20 400 000	0,04		884 000	
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication	-	3			20 000	
Consultation (number of 1 day meetings)	-	78			116 000	
Kits / reagents / vaccines						
Other costs for Animal Health (1)					5 674 380	
Other costs for Animal Health (2)					1 340 000	
Sub-total Consumable resources					**11 834 380**	
Delegated activities / year						
					9 500 000	
Sub-total Delegated activities					**9 500 000**	
Total in	***USD***				***41 677 078***	***15 017 500***
Total in	***NGN***				***6 251 561 667***	***2 252 625 000***

III Strengthening competencies for veterinary public health

The purpose of this section is to explain the proposed activities in the field of food safety.

This will include the activities presented in the Critical Competency Cards II.8, II.9 and II.10. If necessary, links may be made with the important cross-cutting competencies developed in the 5th pillar on management of Veterinary Services (e.g. Chapter V.2 of the report).

III.1 Strategy and activities

III.1.A Food safety

The critical competency related to food safety was not assessed during the OIE PVS Evaluation mission. After discussion with the Nigerian VS, the corresponding expected level is 3.

The country has 19 modern slaughterhouses with complex processing units, 145 urban abattoirs with large meat processing units (slaughtering, evisceration) and approximately 1,934 slaughter labs[6]. Most abattoirs and slaughter slabs are not adequately equipped and do not comply with international standards. There are no facilities for transportation of processed meat and meat products from abattoirs to market outlets. There are also no designated cold chain facilities for meat preservation in meat shops and markets. The FDL has already developed standards for modern abattoirs.

Ante and post mortem inspection and collection of disease information are under the responsibility of VS at state and LGAs levels. These activities are not carried out in compliance with international standards for all abattoirs producing meat to be distributed in national and local markets. A draft Meat Inspection and Hygiene Act has been developed since 2008 but not yet finalized.

In order to improve the meat inspection to ensure meat safety and for epidemiological surveillance purposes, the following actions will be undertaken:

- Updating the regulation (Abattoirs Act) to enforce ante and post mortem inspection and introduce hygiene and safety requirements. It is important to have a federal in place in each state.
- Assessment of the current staff involved in meat inspection (numbers, skills) to ensure adequate staffing.
- Training for inspectors and butchers (training on legislation, good practices and inspection methods). The way to improve communication between butchers and inspectors could be developed during these training programmes.
- Definition and development of SOP in abattoirs. The stakeholders have to be involved in the definition of these SOPs.
- Commitment of major stakeholders to improve facilities and to manage abattoirs.

In order to facilitate the modernisation of slaughterhouses, the FDL could define standards for different kind of abattoirs (model abattoirs), as has been done for abattoirs in state capitals. These standards could facilitate the definition the minimum requirements for each kind of abattoirs. The first step will be a conception stage at state level involving the main concerned stakeholders, and the second step, will be possible to define common requirements at federal level.

The management of abattoirs must also be improved through public-private partnership (e.g., Lagos abattoir)

Even if it is not directly the mandate of VS, support is needed to finance investment in infrastructure. Definition of a strategic schema to modernise the slaughterhouses in each state

[6] Report on the survey of slaughters houses in Northern States and FCT & Report on the survey of slaughters houses in Southern States, Dec 2008.

could help to find investors or donors for this sector. The existing reports on the survey of slaughterhouses in the country are the basis for a first step in defining such a strategy[6].

These actions could also be applied for poultry sector. Model of modern live birds markets (LBM) have been developed by the AICP project (funded by WB and Nigeria Government) and could be promoted. Modernisation of the poultry sector (slaughtering and processing units) could provide the opportunity to develop exportation of poultry products.

The national dairy sector is also a priority to improve the safety of dairy products in a period of increasing consumption of dairy products. Therefore, the recommended actions (units processing raw milk) are:

- Analysis of the ongoing and past experience in Nigeria, and subsequently, a study tour in Kenya or/and India. The development of the dairy sector is not easy in developing countries: this production requires highly skilled farmers and processors, the cold chain is difficult to manage, and seasonality of the production does not allow an optimization of the use of the investment… A study tour could help the decision-makers in Nigeria define a relevant strategy for sector processing raw milk.
- Updating regulation. There is a need to define regulations adapted to support the development of this sector and to ensure the safety of dairy products.
- Definition of SOPs with stakeholders (HACCP), specially the private sector involved in the collection, processing and distribution of milk products. The definition of good hygiene practices in this sector could help the definition of the minimum requirements included in the regulation.
- Development of tests on brucellosis. Through the collection of raw milk, it could be easy to develop some tests to measure the prevalence of brucellosis in dairy cattle (cf. part on animal health).

III.1.B Veterinary medicines and biologicals

The situation of veterinary medicine biologicals presents many shortcomings: distribution of unauthorised drugs, no distribution control … The veterinary medicines and biologicals market is, first and foremost, a public health issue regarding risks of residues, and secondly, an economic issue for livestock and the field veterinary network, because the medicines and biologicals could be a part of the veterinary practitioners revenue.

According to OIE standards, VS must be deeply involved in the administrative and field control of veterinary medicines and biologicals. In the case of Nigeria, NAFDAC has a mandate to regulate the registration and distribution of drugs including veterinary medicines. However, it seems necessary to establish strong coordination between NAFDAC and FDL (and VCN) concerning:

i. The priorities in registration of veterinary medicines and biologicals in order to take into account the needs of the VS animal health policy in Nigeria and the needs for the development of the livestock sector;
ii. The regulation and the control of distribution which is an important issue for veterinary practitioners. Furthermore, FDL together with state VS and LGAs have the field network to control the conditions of distribution and the use of veterinary medicines.

Therefore, the following actions will be undertaken:

- Implementation of an ad-hoc group FDL/ NAFDAC to start and implement this strategy; The group could be designed by the board of the NAFDAC with people in charge of veterinary medicines and biologicals from the FDL and the NAFDAC;
- Creation of a committee to pilot the policy on veterinary medicines and biologicals involving the CVO and the head of NAFDAC. This committee could be chaired by the CVO, as delegate of OIE, in order to ensure the conformity of the policy developed in Nigeria with international standards. The mandate of this committee could be to propose a strategy and activities for the NAFDAC and FDL;
- Definition of the priorities in registrating veterinary medicines and biologicals in accordance with the national animal health policy;
- Definition of the priorities in the inspection of the imported veterinary medicines and

biologicals;
- Definition of the priorities in the control of the distribution;
- Development of coordinated procedures between FDL and NAFDAC to exchange information and coordinate activities;
- Review the current legislation from registration to the use of veterinary medicines, in order to take into account the OIE requirements;
- Coordination between FDL and NAFDAC to carry out the field inspections from producers, importers, retailers and users. Some inspection could be carried out by both institutions when relevant for importers and retailers;
- Develop SOPs to field inspections validated by both institutions;
- Establish coordinated procedures for emergency situations or for prosecutions;
- Establish procedures to continuously share the relevant information between both institutions.

At the FDL, there is a need to create a unit in charge of both veterinary medicines and biologicals working closely with NAFDAC and the states, and coordinating field inspections which fall under their responsibility. This unit would be in charge of developing a database on veterinary medicines and biologicals.

III.2.C Residue testing

This CC has not been directly assessed during the PVS Evaluation in 2007. After discussion with the Nigerian VS, the expected level is 3.

According to the situation of veterinary medicines market, the priority must be the testing of antibiotic residues and antiparasites.

For antibiotic residues, rapid method based on biological tests could be used. They are easy to be implemented and not expensive. For the antiparasites, the NAFDAC laboratory seems to be well equipped to carry out tests on some molecules, but there is a lack of training and reagents.

The following actions will be undertaken:

- Definition of an antibiotic testing plan on meat and milk by FDL and NAFDAC (cf. the committee defined above);
- Sampling by the state VS and testing at the NAFDAC laboratory, NVRI and laboratory of pest control of Kaduna;
- Assessment of the results and updating the residue testing plan;
- Upgrading the laboratory of NAFDAC to be able to test antiparasites;
- Definition and setting up of antiparasite residues control plan.

The results of residues testing plan must be used for a communication campaign for consumers in order to pressure the actors of this market. These results will help the implementation of the strategy defined for the CCII.9 concerning veterinary medicines and biological.

The choice of biological tests must be decided taking into account the statistics on the main molecules sold in Nigeria. The antiparasite residues plan must focus on the most frequently used molecules.

The budget only includes the resources needed to carry out the samples and the tests.

III.2.D Zoonoses

Zoonoses are targeted through progressive improvement of food inspection and through joint programmes including active surveillance for TB (in collaboration with Public Health) and brucellosis (mainly raw milk with processing units or dairy farm).

It is also planned to improve the early detection and emergency response for HPAI and rabies.

III.2 Human resources

Ante and post mortem inspection at abattoirs and associated premises require approximately 400 veterinarians and 900 veterinary paraprofessionals (Table n°13). The following table provides the

estimates of the required human resources in full time equivalent. The distribution of human resources must be defined taking into account the requirements for each state and each LGA. Some people can share their work between different missions.

Table 13. Estimate of human resources needed for inspection in slaughterhouses

Number of working days per year per employee in the country: 250

Sectors	PVS Critical competency	Number of units or plants	Number of days / unit / year			Human resources (Equivalent full time)		
						Total		
			Veterinarians	Other university degree	Veterinary para-professionals	Veterinarians	Other university degree	Veterinary para-professionals
Abattoirs and associated premises	**II.8A**					**405,2**	**-**	**909,0**
Slaughterhouses (large) (Grade A)		19	180		900	13,7	-	68,4
Slaughterhouses (medium) (Grade B)		145	90		300	52,2	-	174,0
Slaughtering slab (Grade C)		1944	30		42	233,3	-	326,6
Poultry slaughterhouses (integrated farms)		10	250		500	10,0	-	20,0
Poultry market with slaughter		800	30		100	96,0	-	320,0
						-	-	-
						-	-	-
						-	-	-
						-	-	-
						-	-	-

Food inspection of animal products will be performed routinely by VS at state and LGAs levels. It will form part of their regular activities until the assessment of the current staff involved in this activity. Probably, it will be necessary to adapt this recommendation after a precise assessment of the needs in each state and LGA.

For activities related to veterinary medicines and biologicals, 2 veterinarians and one support staff will be required at FDL level to create the unit in charge of veterinary medicines and biologicals.

Concerning laboratory testing (residues of veterinary medecines and biologicals), we have only estimated the budget to carry out the tests.

III.3 Physical resources

Physical resources are detailed in the annexed Cost Estimation Cards of Critical Competency Cards I.8.A & B. II.9 and II.10. The budget needed to build the required slaughterhouses and abattoirs is not included in the report.

However, based on the estimation calculated with FDL, the buildings to be maintained represent 4,045 m2. These buildings are necessary for the offices for inspectors in slaughterhouses and animal product processing units.

We have taken into account the equipment requirements of each inspector: knives, thermometers, specific clothes, boots...

Transport requirements are estimated at 1 car for veterinary medicines unit at the federal level and 400 motorbikes for inspectors in the states. Other physical resources include telecommunication sets (403) and office equipment sets (453).

III.4 Financial resources

The global annual budget to strengthen competencies for veterinary public health is approximately (Table n°14) 15.1 M USD including:

- 2.7 M USD for consumable
- 11.4 M USD for salaries
- 0.672 M USD for investments, including the equipment necessary for inspectors.
- 0.288 M USD for continuing education.

An exceptional budget (42.000 USD) over five years is mainly required for the recruitment of national expertise. Some exceptional investment may be necessary to build inspectors offices. It was not possible to assess this part of the exceptional budget during the mission.

Table 14. Sub-Total for strengthening competencies for veterinary public health

SUB-TOTAL VETERINARY PUBLIC HEALTH						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		4 045				
Existing building to be maintained (m2)	-	4 045	4	1	16 180	
Existing building to be renovated (m2)	-	-	40	10		
Building to be build (m2)		-	90	25		
Transport						
Number of motorbikes	-	400	400	3	53 333	
Number of cars	-	1	23 333	5	4 667	
Number of 4x4 vehicles	-	-	40 000	5		
boats	-	-				
	-	-				
Telecommunication equipment set	-	403	1 200	5	96 720	
Office equipment set	-	453	2 000	3	302 000	
Other specific equipment						
Other equipment for Vet. Public Health (1)					200 000	
Other equipment for Vet. Public Health (2)						
Sub-total Material investments					**672 900**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)	-	-	5 000			
Continuing education (man-days / year)	-	2 049,0	144		295 967	
National expertise (days/5 years)		120,0	350			42 000
International expertise (weeks/5 years)		-	10 250			
Special funds (/ 5 years) for …		-				
Sub-total non material expenditure					**295 967**	**42 000**
Salaries / year						
Veterinarians	-	402,0	15 000		6 030 000	
Other university degree	-	-	10 000			
Veterinary para-professionals	-	900,0	6 000		5 400 000	
Support staff	-	1,0	3 000		3 000	
Sub-total Salaries					**11 433 000**	
Consumable resources / year						
Administration			20%		2 286 600	
Travel allowances						
staff within the country (man-days) / year	-	550	80		44 000	
drivers within the country (man-days) / year	-	-	67			
staff abroad (man-weeks) / year	-	9	3 600		32 400	
Transport fees						
Km or miles Motorbikes / year		4 000 000	0,04		173 333	
Km or miles cars / year		20 000	0,07		1 387	
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication	-	4			75 000	
Consultation (number of 1 day meetings)	-	7			8 000	
Kits / reagents / vaccines	-	-				
Other costs for Vet. Public Health (1)					79 000	
Other costs for Vet. Public Health (2)					30 000	
Sub-total Consumable resources					**2 729 720**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***15 131 587***	***42 000***
Total in	***NGN***				***2 269 738 000***	***6 300 000***

IV Strengthening competencies for veterinary laboratories

The purpose of this section is to explain the proposed activities in the field of veterinary laboratories: Critical Competency Cards II.1 and II.2.

IV.1 Strategy and activities

With the NVRI, Nigerian VS have a good central laboratory, which has developed many international relationships with various laboratories. It could be a good national reference laboratory for all animal health tests.

Many local laboratories are also involved in animal health tests, and sometimes in food microbiology. It could be public laboratories (laboratories from State VS or LGA, university, NVRI satellites laboratories...) or private laboratories developed by private vets or private animal product companies. However, their capacities are limited and it is difficult to be sure of the quality of their tests.

A regulation is needed to define minimum requirements to insure the quality of the tests of all these laboratories and to involve them in testing activities for official programmes to control the priority diseases.

Accordingly, the strategy to strengthen the competencies of the veterinary laboratories is based on:

- The development of a regulation framework concerning veterinary laboratories. This regulation must:
  - Require each veterinary laboratory to declare to the relevant state VS and the FDL their scope of activities, human resources, technical managers, etc in order to inform state VS and the FDL of the capacities of the laboratories involved in the national network;
  - Define the minimum duties of these laboratories, such as the notification of animal diseases required by regulation or the mandatory reporting of tests results to state VS or FDL;
  - Define the minimum requirements for these laboratories to ensure the quality of their tests (for instance, participation and good results to proficiency tests;
- The strengthening of technical capacities of these field laboratories through:
  - The definition of a harmonised SOPs describing the testing methods used by these field laboratories for official activities. These SOPs could be defined by the NVRI.
  - The definition of procedures to report testing activities and results to State VS and FDL, including notification of animal diseases.
  - The development of training programmes for field laboratories.
- The development of quality insurance in laboratories with:
  - The development of a quality management system (QMS) in compliance with the norm ISO 17025 by the central laboratory of the NVRI in order to achieve accreditation by an international body. The central laboratory involved in testing veterinary medicines, biologicals, and residues could also be involved in such accreditation procedures;
  - The organisation of proficiency tests for all field laboratories to assess the quality of their tests;
  - The development of training and consultation programmes to support the development of quality management systems in field laboratories.

To ensure the success of the development of the quality management system in the central laboratory of the NVRI, we recommend that the same expert be involved from the diagnosis of the situation and the definition of the plan, right through to the implementation of the QMS and the accreditation of the laboratory. The expert on quality management must have a global overview of the strategy of the laboratory in order to continuously recommend the relevant activities to build a QMS that could be accredited. Some technical assistance could also be included, under the supervision of the expert on quality management.

We also recommend including some local quality management experts (for instance, experts from the Standardisation Organisation of Nigeria) during the process of development of the QMS in the central laboratory of the NVRI. It will be a way to train and to provide experience for local experts who are able to support field laboratories.

IV.2 Human resources

During the mission, we have not assessed the human resources required for the laboratories as:

- The NRVI central laboratory has different missions including research activities, which is not considered in a PVS Gap Analysis
- The data on human resources and the activities of the field laboratories were not available.

IV.3 Physical resources

As for human resources, it was not possible to assess the required physical resources.

IV.4 Financial resources

Finally, the budget for this part only concerns the recommended activities: training programmes, regular meetings with laboratories, local and international expertise...

The global annual budget to strengthen competencies for veterinary laboratories is around: 49.3 K USD.

An exceptional budget (183.000 USD) over five years is mainly required to recruit international and national expertise. Exceptional investment may be required for some laboratories.

Table 15. Sub-Total for strengthening competencies for veterinary laboratory

SUB-TOTAL VETERINARY LABORATORIES						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)	-	-	4	1		
Existing building to be renovated (m2)	-	-	40	10		
Building to be build (m2)		-	90	25		
Transport						
Number of motorbikes	-	-	400	3		
Number of cars	-	-	23 333	5		
Number of 4x4 vehicles	-	-	40 000	5		
boats	-	-				
	-	-				
Telecommunication equipment set	-	-	1 200	5		
Office equipment set	-	-	2 000	3		
Other specific equipment						
Other equipment for Vet. laboratories (1)					2 800	
Other equipment for Vet. laboratories (2)						
Sub-total Material investments					**2 800**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)	-	-	5 000			
Continuing education (man-days / year)	-	150,0	144		21 667	
National expertise (days/5 years)		230,0	350			80 500
International expertise (weeks/5 years)		10,0	10 250			102 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**21 667**	**183 000**
Salaries / year						
Veterinarians	-	-	15 000			
Other university degree	-	-	10 000			
Veterinary para-professionals	-	-	6 000			
Support staff	-	-	3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80		18 400	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication	-	-				
Consultation (number of 1 day meetings)		1			2 000	
Kits / reagents / vaccines	-	-				
Other costs for Vet. laboratories (1)					4 500	
Other costs for Vet. laboratories (2)						
Sub-total Consumable resources					**24 900**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***49 367***	***183 000***
Total in	***NGN***				***7 405 000***	***27 450 000***

V Strengthening competencies for general management and regulatory services

The purpose of this section is to explain the proposed organisation of VS in functional terms:

- Central leadership and chain of command of the Nigeria's VS;
- Coordination of operational levels;
- Operational level of the national network, including delegated activities.

In this section, reference should be made to the Critical Competency Cards I.2, I.3, I.4, I.5, I.6, I.11, II.3, II.11, II.12, III.1, III.2, III.3, III.4, III.5, III.6, IV.1, IV.2 and IV.3.

V.1 General organisation of the Veterinary Services

It was not the mandate of the mission to define the general organisation of the VS in Nigeria. However, during the mission, some weaknesses have been identified and below are some recommendations:

- At the federal level, mainly three insitutions are involved in the VS: the FDL, the NAQS, and the NAFDAC. The coordination between these institutions must be strengthened to facilitate the coordinate of the public policy, to ensure more efficient sharing of responsibilities and exchange of relevant data:
    - For instance, it is an effective strategy to create an institution in charge of the border control to optimize the resources at the border posts. However, imports of live animals and raw animal products (as milk powder) are under the responsibility of the NAQS. Import of veterinary drugs, processed animal products or feed is under the responsibility of the NAFDAC. Coordination between the institutions is therefore necessary. Any problem identified regarding processed animal products must be known by the NAQS in order to manage risks associated with importing live animals or animal products from the same country.
    - The CVO must be informed of any non-compliance of imported products, in order to decide which measures must be undertaken to manage the problem together with the CVO of the country which has exported the products.
    - The inspection of the distribution of veterinary medicines and biologicals will be more efficiently managed by the FDL (or the state VS) with its field network on the territory than by the NAFDAC. Information on the distribution circuits is also important for the FDL because it is a way to finance the veterinarians' network in the country.
- The coordination between federal and state level must be improved. Firstly, the situation is very different between states. The FDL has no mandate to assess state VS which are independant. However, it is important for the FDL to be able to inform each state of the situation of their VS (staffing, capacities...). This information could be provided on a voluntary basis with an analysis of the state's needs to implement national policy and to develop specific programmes adapted to the local situation, including discussions with the DVS, presentation of the conclusion to the governor... It could be a kind of support service of the FDL.
- There are private veterinarians, but they are not really integrated in the public animal health policy. It may be possible to intregate these veterinarians by involving them in delegated activities (vaccination campaign, surveillance...). This may be a way to increase human resources for animal health policy without recruiting too many civil servants.

V.1.A Technical independence

Technical independence is a key issue for the management of VS. It means that decisions are based on scientific (or technical) assessments without any pressure.

Firstly, **it is necessary to strengthen the capacity to develop risk analysis** (see CC II.3) in Nigerian VS.

- Without any relevant information, it is difficult to carry out a risk analysis. The first step is to develop the information system of the FDL in order to facilitate collection of all the data from field level (see CC I.11 and paragraph V.2.C). The information system of the FDL must develop an exchange of information procedure with other institutions: NAFDAC, NAQS, NRVI... The NADIS could be the focal point to facilitate this exchange of data.
- The NADIS has begun to develop risk analysis. NADIS could be in charge of

developing a common methodology and transferring it to other institutions which could be involved in risk analysis: NAFDAC for risks linked to veterinary drugs, NAQS for risks linked to animal trade and animal products. The risk analysis capacity could be also developed at state level, because in a large country such as Nigeria, some states may have to make some decisions which are specific to their territory. Therefore, the states also need a methodology for risk analysis.

The second step involves developing harmonized procedures in order to have a homogeneous implementation of the national veterinary policy with decisions based on the same rules all over the country. This requires formal procedures and training of the staff (see CC I.3 and paragraph V.2.B). It also means a good chain of command (see CC I.6 and paragraph V.1.B) in order to have effective coordination between state and federal level.

In order to avoid any staff pressure, it is important to harmonise the salaries of veterinarians employed at federal level and in each state. Some significant differences have been identified. This problem must also be resolved to ensure an effective recruitment system in each state.

V.1.B Coordination

The strengthening of the chain of command in a federal country is not easy because there is no hierarchical link between federal and state level. Therefore the chain of command must be based on confidence between the different levels (Federal, State, LGA) in order to share the information and to make the relevant decisions.

When some actions have been managed and financed at the federal level, such as the HPAI programme, the chain of command has proven to be effective in Nigeria. **The best strategy for the FDL is to develop assistance to support the state VS by**:

Supplying databases and tools for the state VS: procedures, guides, training... If the state VS used the tools and the database defined by the FDL, it would be easier to exchange data and the staff from both state and federal levels would work more closely.

- Strengthening the federal staff in each state in order to maintain a permanent exchange of information between federal and state level.
- Organising regular meetings in each state between the CVO and the DVS, and regular meetings with all DVS.
- Sending regular information on the sanitary situation in the country to all DVS.

The coordination must also be strengthened with the other institutions (NAFDAC, NAQS, VCN...). This means information sharing and meeting to coordinate policies. It has been developed in CC II.9 for NAFDAC, CCII.4 for NAQS, CC III.5 for VCN.

V.1.C Veterinary practice organisation and policy

The VCN is quite well organised in Nigeria. However, due to a lack of resources, the precise and updated repartition of veterinarians in the country is not well known. There is inadequate staffing in some states, and given the demographics of the veterinary profession in the country, future requirements must be anticipated. .

It is therefore recommended to carry out a study on human resources concerning veterinarians and veterinary paraprofessionals, in order to be able to adapt the human resources to the VS mission.

- This study must cover the public and private sector, in order to have a complete census of both sectors. The study should cover the identification of all veterinarians in the country and their activities.
- This would provide the opportunity to bring about a better integration of private veterinarians into the animal health public policy through delegated activities (vaccination campaigns, identification of animals, inspection in some slaugtherslabs).
- The study also must cover the veterinary para-professionals involved in the public and private sectors. This may be the first step for the VCN before defining a registration system at the VCN level.
- The study could also provide the opportunity to identify the priorities to design a national policy for continuing education for veterinarians and veterinary para-professionals.

Furthermore, the VCN must be strengthened through:

- Updating the legislative framework to strengthen the mission of the VCN;
- Improving the procedures for registering veterinarians and veterinary para-professionals;
- Developing VCN activities in coordination with continuing education; the VCN could assess with FDL and representatives of private veterinarians the needs of continuing education on a yearly basis;
- Developing coordination procedures with the main official insitutions: FDL, NAFDAC...
- Developing VCN communication strategy regarding its activity.

In order to carry out this work, the human resources of the VCN must be strengthened by recruiting 7 veterinarians. Subsidies to VCN will be necessary to support its missions.

V.1.D Official delegation

Taking into account the needs to strengthen the animal health policy (see part II), the FDL has to develop delegated activities for private veterinarians. Some pilot programmes to experiment delegated activities ("Sanitary Mandate") are ongoing in some states. After evaluating these pilot programmes, it will be necessary to strengthen the tools to develop and control delegated activities for private veterinarians:

- Update the legislative and regulatory framework;
- Define the procedures to manage delegated activities: selection of veterinarians for delegated activities, implementation of delegated activities, and supervision of field activities...
- Organise consultations with states and stakeholders.

The decision and the practical organisation of the delegated activities will be under the responsibility of the state VS. However, the FDL has a strong role to play in supporting the state VS in implementing the delegated activities: preparation of the legislative framework, definition of the procedures, and conception of tools (databases...) to supervise these activities...

A provisional budget for delegated activities has been estimated at approx 9.5 M USD per year to cover all delegated activities (see II.1.B).

V.2 Cross-cutting competencies of the VS

If the support between the federal level and the state VS must be strengthened; it means that the cross-cutting competencies must be improved.

V.2.A Initial training

Nigeria has five accredited faculties of veterinary medicine (Ibadan, Maiduguri, Nsukka, Sokoto, and Zaria). Two more veterinary faculties are not yet accredited. Three colleges of animal health and production located in Ibadan, Kaduna, and Vom also provide training for veterinary para-professional.

The first question is to determine the needs for initial training of veterinarians and paraprofessionals. The study recommended in V.1.C will provide data to estimate the needs to anticipate the retirements and to estimate the total number of veterinarians needed to fulfil all the missions of VS.

Training of young veterinarians and research activities

Taking into account the fact that some states do not want to recruit young veterinarians from other states, it is important to identify the needs for each state and to develop policies to encourage young students from the states to apply to veterinary faculties (scholarships...). The VCN could play a role in defining a policy to train veterinarians in states where they are in short supply... It is important to remember that effective initial training of veterinarians requires a significant investment (facilities, human resources, equipment...). Accordingly, the initial training of veterinarians must be concentrated in few veterinary faculties with good facilities and a high level pedagogical team.

Coordination could be developed between FDL and the veterinary faculties in order to discuss how to adapt the courses in the faculty to the needs of Nigeria, both for public and private activities.

The second mission of veterinary faculties is research activities. Nowadays, research activities are driven more by financing opportunities and cooperation with international institutions rather than by the specific needs of Nigeria. It would be interesting to establish a committee group with veterinary faculties, other research institutes (NVRI...), stakeholders and FDL in order to design, plan and carry out a research policy adapted to the country's needs. This committee could be led by FDL.

During the mission, it was not possible to assess the needs for investment or to strengthen the capacities of veterinary faculties. Audits could be carried out in each veterinary faculty to assess the pedagogic project of the faculty and its capacity to train veterinarians for rural activities, the capacity to develop continuing education or to develop research activities, the link between faculties and stakeholders, to determine the investment required... The methodology of the audit could be defined using international standards (European and American standards, and in the future OIE recommendations).

Training of veterinary para-professionnals

The NBTE (National Board of Technical Education) evaluates the training for technicians in different areas. It is important that VCN (and its partners such as FDL) work closely with the NBTE to define the courses to train technicians on animal health and VPH, and to promote the accreditation of colleges in charge of training technicians.

FDL and state VS could recruit veterinary para-professionals from these accredited colleges.

The result of the study (see V.I.C) will provide data to determine the number of technicians to be trained for the following years, and the number of colleges which must be accredited.

V.2.B Continuing education

Following the conclusion of the study recommended in part V.1.C it will be possible to design a national policy for continuing education. The VCN could coordinate with FDL, NAQS, NAFDAC for the development of this policy and representatives of the private sector.

It will then be necessary to define procedures for a systematic review of the requirements every year at each level (state, FDL...) by the VCN. The VCN could define a continuing education programme to cover all the main topics, using veterinary faculties, veterinary experts for the concrete organisation of these trainings... The impact of these continuing education activities would then be assessed.

There is a strong need for continuing education. In our plan, we have estimated about 5,000 man-days per year for continuing education, so more than 300 sessions for 15 persons and approximately 10 sessions per state.

V.2.C Management of operations and resources

Management of operations and resources is a key issue for the FDL. To decide upon and implement any programme, the FDL and the relevant state VS must precisely know the resources available to be sure it is possible to implement the programme correctly. In the past, difficulties in programmes are the consequences of a lack of resources in some part of the country well not identified by the FDL.

Furthermore, at state level, the availability of resources (human resources, funding...) is also an indicator of the state's motivation for a relevant animal health and VPH policy. In a federal country, some states may have less interest for some animal health programmes compared to others because of the low income from livestock in comparison to other economic sectors. Even in such situations, it is important to implement such programmes which are often interlinked with others (eradication of a disease, rapid alert in case of emerging issue...). In such cases, the FDL must be able to support the state VS.

Therefore, the first condition for a good management and supervision of the operation is to have updated and relevant information through a functional Veterinary Services Information Management System (VSIMS). The first step will be to audit the existing flow of information from field to state and federal level. The second step is to design the database

software (VSIMS) and to implement it. The development of such tool is a part of the FDL strategy to support the state VS (see V.I.B). The VSIMS must be able to exchange data with others agencies (NAQS, NAFDAC, NVRI...).

Even if there is a significant budget for the conception of the VSIMS, the audit during the first year will determine the relevant resources to design this tool.

Because it was not possible to have a precise inventory of resources for the state VS, **we recommend an internal study to assess in each state the situation of the buildings, of the equipment** (vehicles, telecommunication, internet connexions, office equipment...) and determine a plan to invest and modernise the buildings and the equipment (see I-7).

V.2.D Communication

The success from the main actions of the VS is dependent on the quality of communication towards stakeholders and beneficiaries to explain the actions and the vested interest for them and to highlight the political value of VS activities.

Communication activities have been recommended for several activities in this plan. An annual budget of more than 100.000 USD per year has been defined.

However, the strengthening of the communication competencies of VS in Nigeria requires:

- The definition of a common strategy of communication for FDL and DVS in order to have coherent messages for stakeholders and private veterinarians.
- The development of a communication unit in the FDL with specialised staff capable of leading a communication campaign for FDL or to support the DVS in their own communication campaigns;
- The definition of tools for regular communication such as a website, newsletters, medias... For instance, the FDL website could give access to specific pages for each state VS...

Again, for this competency, the FDL can support state VS.

V.2.E Consultation with stakeholders

In a large country such as Nigeria, the consultation process must be organised at different levels: LGA, state, and federal levels with communication of consultations' results between different levels.

For the different activities, a lot of meetings and resources have been planned for consultation (around 300.000 USD per year). However, it is important to develop a formal mechanism for consultation at different levels to be sure to have all the representative organisations of stakeholders involved, especially with the informal sector.

At each level (LGA, state, and federal), VS need to have an inventory of all these representative organisations, to define a process for minimum consultation every year, to transfer the conclusion of these consultations from one level to another one. The National Livestock Committee could analyse, at least every year, the synthesis of these consultations and prepare some recommendations to improve their quality. It would be interesting to verify that the main representative stakeholders' organisations and institutions are members of this committee.

Again, the FDL can coordinate and support the conception of the procedures for consultation in each state.

V.2.F Official representation

The VS in Nigeria have a high level of participation in international meetings. With the appointment of the FDL as chair of the sub-committee on animal feeds and animal products of the national committee of Codex Alimentarius, the involvement of the FDL in the Codex Alimentarius activities will be improved.

The recommendations involve improving the preparation of these meetings to collect contributions of different institutions and state VS, and the improvement of the feed-back after the meetings (diffusion of results and proceedings...)

V.2.G Joint programme

The different activities recommended will provide opportunities to develop joint programmes: especially for ASF eradication (if it is confirmed) or the programme to improve hygiene in the dairy sector.

V.2.H Legislation

For all recommended activities, legislation is an important issue for Nigeria.Legislations and regulations must be updated and adapted in order to be implemented. The federal legislation must be often transposed in the state legislation.

Fortunately, an OIE mission on legislation will be organised early 2011 in, order to support Nigeria in this field. This mission will have to take into consideration the difficulties in applying such federal legislation in each state.

After defining the legislation, training must be planned for VS staff and stakeholders.

Procedures for inspection must be defined with appropriate prosecution. The inspectors must be trained. A large part of the resources needed to train the VS staff and the stakeholders has been defined for the corresponding activities.

V.3 Human resources

The following table describes the human resources for VS management. This table is not an organisation chart, but an inventory of human resources' needs.

Table 16. Human resources for the VS management

Sectors	PVS Critical competency	Public (full time equivalent)			
		Veterinarians	Other university degree	Veterinary para-professionals	Support staff
Coordination of the VS	**I.6A/I.6B**	**171,0**	**4,0**	**14,0**	**122,0**
Central level		**97,0**	**4,0**	**14,0**	**48,0**
Head of VS					
Head of VS		1,0			
Secretary services				1,0	2,0
General Cross-cutting competencies					
Human resources, management, continuing education			1,0		
Accounting and credit management, supplying management			1,0		
Information system and databases			2,0	1,0	
Secretary planning		3,0			
Animal health					
AICP		3,0		1,0	2,0
Vaccine logistic		1,0		1,0	
Disease control		3,0		2,0	
				1,0	2,0
Animal identification		3,0		4,0	2,0
Veterinary pharmacy and veterinary medicines					
Veterinary drugs and veterinary practice		2,0			1,0
Veterinary public health					
Veterinary public health		6,0		3,0	2,0
International relations					
Management of border posts and international alerts		1,0			
Federal staff at State level					
Federal staff at state level		74,0			37,0
Veterinary Services at State Level 1st level of deconcentrated coordination	**I.6A/I.6B**	**74,0**	**0,0**	**0,0**	**74,0**
DVS		37,0			37,0
Deputy DVS		37,0			37,0
Legislation and regulation	**IV.1 IV.2**	**0,0**	**2,0**	**0,0**	**0,0**
Legal services			1,0		
Enforcement services			1,0		
Communication	**III.1**	**0,0**	**1,0**	**0,0**	**0,0**
Communication service			1,0		
Risk analysis / Emerging issue / technical innovation	**II.3 II.11 II.12**	**5,0**	**1,0**	**1,0**	**1,0**
Risk analysis unit and epidemiology		5,0	1,0	1,0	1,0

Some comments on this table are necessary:

- The staff at the FDL (federal level) must be able to coordinate all the VS activities.
- A unit for veterinary medicines and biologicals is recommended to coordinate the activities with NAFDAC and to organise inspections of veterinary drugs' distribution.
- A unit "international relations" also coordinates the activities with the NAQS.
- In each state, the FDL could have veterinarians to coordinate the activities between the FDL and the state VS.
- Legislation and regulation units, communication service, risk analysis units are units of the FDL.
- The coordination level of state VS (DVS) must include 2 veterinarians and 2 support staff. The other state VS staffs are involved in operational activities.

V.4 Physical resources

The corresponding physical resources for the entire staff have been determined:

- Building surface area of 3 868 m2;

- Approximately 300 telecommunication equipment sets and office equipment sets (computers...);
- Approximately 84 cars: 1 per state for state VS, 1 per state for staff of FDL and several cars for headquarters...

It is important to remember the resources for the VSIMS: creation of the software, supplying of computers and servers, internet connections...

V.5 Financial resources

The global annual budget for strengthening competencies for general management and regulatory services (Table n°17) amounts to approximately 5.6 M USD including:

- 1.4 M USD for consumable expenses, including maintenance of the database, VSIMS (150 K USD) and subsidies for VCN (150 K USD).
- 3,2 M USD for salaries
- 0.9 M USD for investments. This investment includes buildings, office equipment sets, telecommunication sets and the VSIMS.
- 0.04 M USD for continuing education.

An exceptional budget (782.000 USD) over five years is required mainly to invest in the VSIMS and to recruit personnel with national and international expertise.

Table 17. Sub-Total for strengthening general management and regulatory services

SUB-TOTAL MANAGEMENT OF VETERINARY SERVICES						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		3 868				
Existing building to be maintained (m2)	-	3 868	4	1	15 472	
Existing building to be renovated (m2)	-	-	40	10		
Building to be build (m2)		-	90	25		
Transport						
Number of motorbikes	-	-	400	3		
Number of cars	-	21	23 333	5	98 000	
Number of 4x4 vehicles	-	63	40 000	5	504 000	
boats	-	-				
	-	-				
Telecommunication equipment set	-	261	1 200	5	62 640	
Office equipment set	-	281	2 000	3	187 333	
Other specific equipment						
Other equipment for management of VS (1)					68 333	666 667
Other equipment for management of VS (2)						
Sub-total Material investments					**935 779**	**666 667**
Non material expenditure						
Training						
Initial training						
Specialised training (man-months / 5 year)	-	-	5 000			
Continuing education (man-days / year)	-	276,0	144		39 867	
National expertise (days/5 years)		155,0	350			54 250
International expertise (weeks/5 years)		6,0	10 250			61 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**39 867**	**115 750**
Salaries / year						
Veterinarians	7,0	169,0	15 000		2 535 000	
Other university degree	-	8,0	10 000		80 000	
Veterinary para-professionals	-	61,0	6 000		366 000	
Support staff	-	81,0	3 000		243 000	
Sub-total Salaries					**3 224 000**	
Consumable resources / year						
Administration			20%		644 800	
Travel allowances						
staff within the country (man-days) / year	-	685	80		54 800	
drivers within the country (man-days) / year	-	-	67			
staff abroad (man-weeks) / year	-	3	3 600		10 800	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year		420 000	0,07		29 120	
Km or miles 4x4 vehicle / year		1 575 000	0,13		204 750	
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication	-	1			10 000	
Consultation (number of 1 day meetings)		52			81 000	
Kits / reagents / vaccines	-	1			1 000	
Other costs for VS management (1)					213 500	
Other costs for VS management (2)					150 000	
Sub-total Consumable resources					**1 399 770**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***5 599 415***	***782 417***
Total in	***NGN***				***839 912 300***	***117 362 500***

VI Global budget analysis

VI.1 Analysis of the global budget

Table 18 presents the global budget to strengthen the VS in Nigeria.

The global annual budget is approximately 76.5 M USD. An exceptional budget of 17 M USD is necessary for the coming five years to reach the expected levels for the different critical competencies.

VI.1.A Capital investment

Every year, 3.4 M USD is necessary for investment.

This amount represents around 4% of the global annual budget. This ratio is appropriate for the maintenance of VS equipment and takes into account the following rules that we have used to prepare this budget:

- We have not estimated the number of m2 to be renovated or to be built. No sufficient information was available concerning the buildings used by VS at different levels and their respective conditions.
- The investment needed for laboratories has not been estimated.
- The investment needed for private veterinary clinics involved in delegated activities are not estimated. These investments will be paid through the fees for delegated activities.

An exceptional budget to invest 1.2 M USD over five years is required mainly to invest in the VSIMS and the equipment for the border posts. This exceptional budget is very low because it was not possible to assess the building requirements. The recommended study to assess these needs will allow the determination of the cost for the exceptional budget.

VI.1.B Operational funding

The global annual budget for operational activities is 73.1 M USD. It includes:

- 34.7 M USD for salaries. This concerns only salaries for public VS (LGA, state, federal level).
- 28.1 M USD for consumables resources including:
- 11.5 M USD for animal identification (15% of the annual budget);
- 7 M USD for vaccines (less than 10% of the annual budget);
- 270 K USD for laboratory testing;
- 1.4 M USD for transport fees.
- 9.5 M USD for delegated activities (12% of the annual budget);
- 0.8 M USD for continuing education.

VI.1.C Emergency funding and other exceptional funding

The exceptional budget mainly includes 15 M USD for an emergency fund (see ASF).

725 000 K USD is also necessary for expertise (national and international) during the five year plan. It will be necessary to be sure that this expertise is often needed during the first years.

Table 18. Global budget

TOTAL BUDGET									
Resources and Budget lines	Current Number	Required Number	Unit Cost		**Annual Budget**	**Exceptional Budget**	**Total budget for 5 years**	**% annual budget**	**% total budget for 5 years**
Material investments									
Buildings (m2)	-	33 688							
Existing building to be maintained (m2)	-	33 688	4	1	134 752		673 760	0%	
Existing building to be renovated (m2)	-	-	40	10					
Building to be build (m2)		-	90	25					
Transport									
Number of motorbikes	-	2 440	400	3	325 333		1 626 667	0%	
Number of cars	-	34	23 333	5	158 667		793 333	0%	
Number of 4x4 vehicles	-	79	40 000	5	632 000		3 160 000	1%	
boats	-	-							
	-	-							
Telecommunication equipment set	-	1 392	1 200	5	334 080		1 670 400	0%	
Office equipment set	-	2 182	2 000	3	1 454 667		7 273 333	2%	
Other specific equipment									
Other equipment					357 100	1 220 833	3 006 333	0%	7%
Other equipment									
Sub-total Material investments					**3 396 599**	**1 220 833**	**18 203 827**	**4%**	**7%**
Non material expenditure									
Training									
Initial training									
Specialised training (man-months / 5 year)	-	-	5 000						
Continuing education (man-days / year)	-	5 570,0	144		804 556		4 022 778	1%	
National expertise (days/5 years)		1 135,0	350			397 250	397 250		2%
International expertise (weeks/5 years)		32,0	10 250			328 000	328 000		2%
Special funds						15 000 000	15 000 000		89%
Sub-total non material expenditure					**804 556**	**15 725 250**	**19 748 028**	**1%**	**93%**
Salaries / year									
Veterinarians	38,0	1 285,0	15 000		19 275 000		96 375 000	25%	
Other university degree	10,0	19,0	10 000		190 000		950 000	0%	
Veterinary para-professionals	55,0	2 456,0	6 000		14 736 000		73 680 000	19%	
Support staff	-	167,0	3 000		501 000		2 505 000	1%	
Sub-total Salaries					**34 702 000**		**173 510 000**	45%	
Consumable resources / year									
Administration			20%		6 940 400		34 702 000	9%	
Travel allowances									
staff within the country (man-days) / year	-	2 635	80		229 200		1 146 000	0%	
drivers within the country (man-days) / year	-	-	67						
staff abroad (man-weeks) / year	-	20	3 600		72 000		360 000	0%	
Transport fees									
Km or miles Motorbikes / year		24 400 000	0,04		1 057 333		5 286 667	1%	
Km or miles cars / year		680 000	0,07		47 147		235 733	0%	
Km or miles 4x4 vehicle / year		1 975 000	0,13		256 750		1 283 750	0%	
km or miles boats / year			0,05						
km or miles / year									
Specific costs									
Targeted specific communication	-	11			116 000		580 000	0%	
Consultation (number of 1 day meetings)	-	187			296 500		1 482 500	0%	
Kits / reagents / vaccines	-	1			1 000		5 000	0%	
Other costs					17 538 380		87 691 900	23%	
Other costs					1 565 000		7 825 000	2%	
Sub-total Consumable resources					**28 119 710**		**140 598 550**	37%	
Delegated activities / year									
Specific delegated activities					9 500 000		47500000	12%	
Other activities or global estimation									
Sub-total Delegated activities					**9 500 000**		**47 500 000**	**12%**	
Total in	***USD***				***76 522 864***	***16 946 083***	***399 560 404***	***100%***	***100%***
Total in	***NGN***				***11 478 429 633***	***2 541 912 500***			

VI.2 Profitability and sustainability

VI.4.A Analysis related to national economy and budget

The annual budget of 76.5 M USD must be compared to 22 billion USD of the estimated livestock GDP. The budget for VS represents only 0.3% of the livestock GDP.

We can consider this s a minimum in such a large country with a livestock GDP representing more than 7% of the national GDP. It is also important to remember that livestock involves more or less 52% of the population.

This budget represents only 2.27 USD per VLU (Livestock GDP/VLU is around 660 USD).

The annual budget represents only 0.24% of the national budget in Nigeria. This is very low in comparison to the contribution of livestock to the national GDP.

This means that it may be possible to increase this budget for VS:

- The preliminary studies which we have recommended to carry out include the inventory of physical resources in each state VS or to define the organisation and resources for an efficient border control. This will probably increase the need for investment.
- Our plan is mainly organised for national action programmes. It could be possible for some states to add specific actions for some state priorities.

The cost of the main animal diseases has been estimated in Nigeria[7] (Table 19) and it represents around 130 M USD. Considering the recommended programmes on the priority diseases (ND, CBPP, PPR, ASF), we can estimate that the economic losses could be reduced by approximately 50 M USD.

Table 19. Estimation of the economic losses due to the main animal diseases in Nigeria[5]

	Economic losses in M USD
ND	60
ASF	10
CBPP	46
PPR	14
Total	**130**

VI.4.B Analysis of distribution per pillar

The main part of the budget concerns animal health policy with 54% of the annual budget (Table 20). 20% concerns veterinary public health. It is normal in a country with a livestock GDP representing more than 22 billion USD.

We can estimate the volume of live animals and animal products imported to Nigeria at approximately 500 M USD. The budget for international trade activities represents 18% of the annual budget. It is normal, to protect the territory, with a large number of live animals imported from neighbouring countries.

We can add some comments on Table 20:

- For the investment, the larger part is for general management with the conception of the VSIMS. Some complementary investment in building will be defined after the preliminary studies on border control and on physical resources of the state VS.
- Non material expenditure mainly concerns continuing education. It has been shared

[7] Financial Costs of Disease Burden, Morbidity and Mortality from Priority Livestock Diseases in Nigeria. INTEGRATED ANIMAL AND HUMAN HEALTH MANAGEMENT PROJECT. ILRI, World Bank (draft report).

between animal health, veterinary public health and border control.

- The salaries for the border may seem low, but it will depend on the organisation of control at border posts defined after the preliminary study (number of border posts, movements, and coordination with custom services...).
- The amount for consumable resources is important for animal health pillar with vaccines and for international trade pillar with animals identification.

ANNUAL BUDGET PER PILLAR						
Resources and Budget lines	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	General management	**Total**
Material investments						
Sub-total Material investments	338 533	1 446 587	672 900	2800	935 779	3 396 599
%	*10%*	*43%*	*20%*	*0%*	*28%*	
Non material expenditure						
Sub-total non material expenditure	150 944	296 111	295 967	21667	39 867	804 556
%	*19%*	*37%*	*37%*	*3%*	*5%*	
Salaries / year						
Sub-total Salaries	1 445 000	18 600 000	11 433 000		3 224 000	34 702 000
%	*4%*	*54%*	*33%*		*9%*	
Consumable resources / year						
Sub-total Consumable resources	12 130 940	11 834 380	2 729 720	24900	1 399 770	28 119 710
%	*43%*	*42%*	*10%*	*0%*	*5%*	
Delegated activities / year						
Sub-total Delegated activities		9 500 000				9 500 000
%		*100%*				
Total in USD	**14 065 418**	**41 677 078**	**15 131 587**	**49 367**	**5 599 415**	**76 522 864**
%	*18%*	*54%*	*20%*	*0%*	*7%*	
Total in NGN	**2 109 812 667**	**6 251 561 667**	**2 269 738 000**	**7 405 000**	**839 912 300**	**11 478 429 633**

CONCLUSION

The PVS Gap Analysis mission has defined a strategy for the VS in Nigeria together with a sustainable budget. This budget is compatible with the resources of Nigeria as well as its livestock issues. Even if this PVS Gap Analysis mainly follows a federal approach, it may be possible for some states to complete this budget for some specific actions at state level.

We have recommended some complementary studies to complete this work on the organization of the border control and the inventory of physical resources at state level.

The main objective of this PVS Gap Analysis is to highlight the federal priorities:

- On animal health with a federal strategy for priority diseases (CBPP PPR, tuberculosis, brucellosis, ND,…);
- On veterinary public health with the improvement of control and inspections in abattoirs, food safety in the raw milk processing, control of veterinary medecines and biologicals;
- On border control with a strengthening of the organisation of NAQS and more effective coordination with other institutions.

However, there are several conditions for the success of the PVS Gap Analysis:

- The coordination and support role of the FDL must be strengthened to assist state VS. It is therefore important to build a VSIMS in order to strengthen human resources of the FDL in each state and to develop training and tools for state VS and field veterinarians…
- The success of the PVS Gap Analysis will depend on the commitment of each state to apply a commonly defined policy. The different activities must be implemented following the same principles with the relevant resources in all Nigerian states. The competency of the Animal Health or Veterinary Public Health Policy is ensured by each state in the Nigerian Federal System. This is the reason why the FDL has a key role to play in supporting and assisting each state VS when they encounter difficulties.
- The coordination between the federal agencies (FDL, NAQS, NAFDAC, VCN…) must be also strengthened to facilitate the communication of relevant information to the CVO.

The last condition involves updating the legislation concerning veterinary services. Some Acts are in preparation. However, the main difficulty is ensuring the participation of all the states in the process of upgrading their legislation.

APPENDICES

Appendix 1: Presentation of the methodology

The present note explains the methodology used to prepare the budgets and to estimate budget requirements.

The budget has been prepared using USD. The budgets have then been translated into the local currency.

1- Currencies		
	Currency	Exchange rate
Currency used for this report (USD or EUR)	USD	Number of NGN per USD
National currency	NGN	150

A1.1 Unit costs

Firstly, unit costs were estimated for different items and it was then possible to determine the number of units necessary for each activity card.

The material investments have been determined as indicated in the table below:

- Buildings: the cost has been estimated for a new building, for renovation or for maintenance of 1 unit of surface (= for 1 m²).
- Means of transport considered include motorbikes, cars, 4x4 vehicles or any other specific means of transport.
- A "communication unit" includes the average cost for a telephone (mobile or fixed with a fax…). The "office equipment unit" corresponds to a computer with its base peripheries (printers). It allows replacing an individual base printer with a photocopier printer.
- The duration of amortisation is stated for each investment.

	A	B	C
7	2- Material investments		
8		Supply cost / unit	Number of years for amortisation
9	Buildings	*Unit of surface (m²) or (ft²)*	m2
10		*Maintenance cost m2*	-
11		*Cost to renovate m2*	
12		*Cost built m2*	
13	Transport		
14		*Cost of motorbikes*	
15		*Cost of cars*	
16		*Cost of 4x4 vehicles*	
17			
18			
19		*Cost of Telecommunication equipment set (scanner+fax+telephone+photocopier)*	
20		*Cost of officer equipment set (base computer and necessary peripherics)*	

For non-material expenditure, the following average costs have been estimated:

- Training costs for a student during a training period: school fees, scholarships, accommodation and transport costs (especially if the training is taking place abroad).
- Average costs for specialized training abroad, per month;
- Continuous training costs, per day and per trainee, in groups of approximately 15 persons;
- Cost of national expertise, per day, including honoraries and per diems;
- Cost of international expertise, per week, including honoraries, per diem and travel expenditure.

	A	B	C
21	**3- Non material expenditure**		
22	**Training**		
23	**Initial training (per student)**		
24	*Veterinarians (DVM, BVS) cost*		
25	*Veterinary paraprofessionals training cost*		
26	**Specialised training (short courses, certificates, master, PhD…)**		
27	*Accommodation per month*		
28	*Training fees per month*		
29	*Travel per month*		
30	***Cost of specialised training per month***	-	
31	**Continuing education (daily cost per man on a basis of a group of 15 people)**		
32	*Per diem 15 participants*	-	
33	*Room rental and educational tools per day*		
34	*Daily fees for a national expert consultant*	-	
35	***Daily cost per trainee***	-	
36	**National expertise (cost per day)**		
37	*Daily fees*		
38	*Per diem*		
39	***Total per day and per expert***	-	
40	**International expertise (cost per week)**		
41	*Daily fees*		
42	*Per Diem*		
43	*Intercontinental travel*		
44	***Total cost per week***	-	

The annual average wage bill per category of agents integrates all the elements of remuneration and salaries contributions, notably incentives.

	A	B	C
45	**4- Salaries (salaries, bonuses and social benefits) / year**		
46	*Veterinarians*		
47	*Other university degree*		
48	*Veterinary para-professionals*		
49	*Support staff*		

For running costs, the following have estimated:

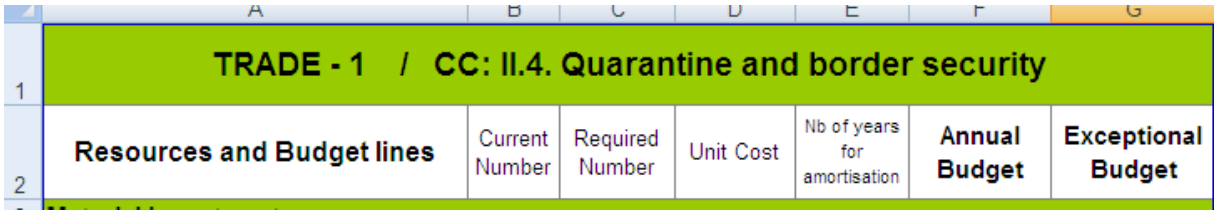
- Per diem for different VS agent categories;
- Fees for a mission of one week abroad ;
- The cost per kilometres and per type of vehicle, taking into account maintenance and insurance;
- The average number of kilometres driven per vehicle.

	A	B	C
50	**5- Consumable resources**		
51	**Travel allowances**		
52	*Per diem for technical staff*		
53	*Per diem for drivers*		
54	*Daily allowance for technical staff travelling abroad*		
55	*Average cost of an international flight*		
56	***Weekly allowance abroad***	-	
57	**Transport fees**		Unit
58	*Price of fuel (average between petrol, diesel or mixt) per unit*		
59	*Average number of km/miles per year*		Unit
60	*Average distance per year by motorbike (miles or km)*		
61	*Average distance per year by car (miles or km)*		
62	*Average distance per year by 4*4 car (miles or km)*		
63	*Average distance per year by other transport*		
64	*Average distance per year by other transport*		
65		*Fuel consumption per 100 km/miles*	*Running (fuel + maintenance + insurance = consumption x 2)*
66	*Km or mileage cost (motorbike)*		
67	*Km or mileage cost (car)*		
68	*Km or mileage cost (4x4 vehicle)*		
69	*Km or mileage cost ()*		
70	*Km or mileage cost ()*		

A.1.2 Cost estimation cards

For the estimation of pertinent physical resources, a separate cost estimate sheet was elaborated.

Meaning of columns:



	A	B	C	D	E	F	G
1	TRADE - 1 / CC: II.4. Quarantine and border security						
2	Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget

- Current number: the current number of m² per building, personnel, km… These elements were captured to provide background information in order to compare the recommendations with the current situation. It has not been used for any calculation: the absence of this data is not important.
- Required number: quantity of building surface, equipment, personnel, km… that the experts deem necessary to implement the related activities.
- Unit cost: unit costs indicated or estimated, or in the cost unit sheet, or by the experts (cell in yellow) for specific equipment.
- Number of years for amortisation: the duration of amortisation or the average life expectancy for equipment.

Annual budget

The annual budget presents the budget required for VS to maintain the efficiency level defined by the country for the critical competency being considered, and in order to implement the relevant activities. It includes:

- The annual amortisation for equipment (which includes renewal of equipment , taking into account its life expectancy);
- Training fees;
- Salaries and other remuneration (incentives);
- Running costs: consumables, transport, communication, ...;
- Costs linked to delegated activities.

It is calculated taking into account the number of unit costs deemed necessary by experts (column « Required Number »), multiplied by the unit cost (Column « Unit Cost »), divided by the number of amortisation years (column« Number of years of amortisation ») (for material equipment only).

Exceptional budget

The exceptional budget corresponds to the amounts to be mobilized over the routine annual budget, so as to allow the implementation of the recommended 5-year plan. It includes:

- The amortisation part that cannot be covered in 5 years in order to complete the annual budget of the first 5 years required to obtain the necessary equipment or to build buildings.
- Exceptional fees such as :
  - National and international expertise for specific studies and analyses (cf. 2.3.2) ;
  - Initial training for new people with specific skills necessary to implement the VS's action plan, especially if these skills do not exist in the work market.

The global amount necessary to finance the PVS Gap Analysis process over a period of 5 years is equal to 5 times the annual budget + the exceptional budget.

Definition of rows

The following table gives a definition of the main lines.

Material investments	
Buildings ()	
Existing building to be maintained ()	*Surface of existing buildings currently in good condition t*
Existing building to be renovated ()	*Surface of existing buildings to be renovated*
Building to be built ()	*Surface of buildings to be built*
Transport	
Number of motorbikes	*Number of motorbikes necessary to run the action considered*
Number of cars	*Number of cars necessary to run the action considered*
Number of 4x4 vehicles	*…*
Telecommunication equipment set	
Office equipment set	
Other specific equipment	*Specific equipment necessary to run the activity of concern*
Non material expenditure	
Training	
Specialized training (man-months / 5 year)	*Number of man-month for specialized training*
Continuing education (man-days / year)	*Number of man-day for continuous training - necessary to upgrade or maintain the staff"s skills, to allow them to run the actions of concern*
National expertise (days/5 years)	*Number of days of national expertise to be mobilized for the 5 coming years*
International expertise (weeks/5 years)	*Number of days of international expertise to be mobilized for the 5 coming years*
Salaries / year	
Veterinarians	*Total work–time of veterinarians necessary to run the actions of concern, expressed in full-time equivalents (FTE) (practically, of course, the activities would be shared between far more people).*
Other university degree	*Total work–time of professionals necessary to run the actions of concern, expressed in full-time equivalents (FTE)*
Veterinary para-professionals	*Total work–time of veterinary paraprofessionals necessary to run the actions of concern, expressed in full-time equivalents (FTE)*
Support staff	*Total work–time of support staff necessary to run the actions of concern, expressed in full-time equivalents (FTE)*
Sub-total Salaries	
Consumable resources / year	
Administration	*The administrative charges are estimated as 20% of the total of the wage bill*
Travel allowances	
staff within the country (man-days) / year	*Number of days per year the technical staff has to work out off the office, in the country*
drivers within the country (man-days) / year	*Number of days per year the drivers has to be out of the office, in the country*
staff abroad (man-weeks) / year	*Number of man-weeks spent abroad*
Transport fees	
Km or miles Motorbikes / year	*Estimated by the number of motorbikes above, multiplied by the average distance covered by a motorbike for a year*
Km or miles cars / year	*Idem*
Specific costs	
Targeted specific communication	*Communication expenses as for flyers, notices, media campaigns…*
Consultation (number of 1 day meetings)	*Meetings with various stakeholders, expressed in the number of days of meeting*
Kits / reagents / vaccines	*Consumables as reagents, vaccines, etc.*
Delegated activities / year	
	Activities delegated to approved stakeholders (private veterinarians, laboratories…)

A.1.3 Sub-totals sheets per pillars and overall budget

The sub-totals per pillars make up the total of cost estimate cards corresponding to the critical competencies of the pillar. The general budget makes the total of 5 pillars.

A.1.4 Cost units used for this report

The following tables present the different cost units used for the budget.

Unit costs (average estimate)			
1- Currencies			
		Currency	**Exchange rate**
Currency used for this report (USD or EUR)		USD	Number of NGN per USD
National currency		NGN	150
2- Material investments			
		Supply cost / unit	**Number of years for amortisation**
Buildings	*Unit of surface (m²) or (ft²)*	m2	
	Maintenance cost m2	4	
	Cost to renovate m2	40	10
	Cost built m2	90	25
Transport			
	Cost of motorbikes	400	3
	Cost of cars	23 333	5
	Cost of 4x4 vehicles	40 000	5
	Cost of Telecommunication equipment set (scanner+fax+telephone+photocopier)	1 200	5
	Cost of office equipment set (base computer and necessary peripherals)	2 000	3
3- Non material expenditure			
Training			
Initial training (per student)			
	Veterinarians (DVM, BVS) cost	20 000	
	Veterinary paraprofessionals training cost	3 333	
Specialised training (short courses, certificates, master, PhD…)			
	Accommodation per month	2 000	
	Training fees per month	2 000	
	Travel per month	1 000	
	Cost of specialised training per month	**5 000**	
Continuing education (daily cost per man on a basis of a group of 15 people)			
	Per diem 15 participants	1 200	
	Room rental and educational tools per day	617	
	Daily fees for a national expert consultant	350	
	Daily cost per trainee	**144**	
National expertise (cost per day)			
	Daily fees	200	
	Per diem	150	
	Total per day and per expert	**350**	
International expertise (cost per week)			
	Daily fees	1 000	
	Per Diem	250	
	Intercontinental travel	1 500	
	Total cost per week	**10 250**	

4- Salaries (salaries, bonuses and social benefits) / year		
Veterinarians	15 000	
Other university degree	10 000	
Veterinary para-professionals	6 000	
Support staff	3 000	
5- Consumable resources		
Travel allowances		
Per diem for technical staff	80	
Per diem for drivers	67	
Daily allowance for technical staff travelling abroad	300	
Average cost of an international flight	1 500	
Weekly allowance abroad	**3 600**	
Transport fees		Unit
Price of fuel (average between petrol, diesel or mixt) per unit	0,43	l
Average number of km/miles per year		Unit
Average distance per year by motorbike (miles or km)	10 000	km
Average distance per year by car (miles or km)	20 000	km
*Average distance per year by 4*4 car (miles or km)*	25 000	km
Average distance per year by other transport		km
	Fuel consumption per 100 km/miles	*Running (fuel + maintenance + insurance = consumption x 2)*
Km or mileage cost (motorbike)	5	0,04
Km or mileage cost (car)	8	0,07
Km or mileage cost (4x4 vehicle)	15	0,13
Km or mileage cost (boats)	6	0,05
Km or mileage cost ()		
6- National economic indicators		
GDP		**Sources**
National GDP	339 000 000 000	World Factbook 2009
Agriculture GDP	112 209 000 000	World Factbook 2009
Livestock GDP	22 441 800 000	World Factbook 2009
Value of exported animals and animal products	504 000 000	FAOSTAT 2008
Value of imported animals and animal products		
Number of VLU	33 659 895	
Country budget		
National Budget	32 000 000 000	
Agriculture and Livestock Budget		
Veterinary Services Current Budget		

Appendix 2: Critical Competency Cards and corresponding Cost Estimation Cards

I.1. Professional and technical staffing of the Veterinary Services.
I.1.A.Veterinary and other professionals (university qualifications)

1. Specific objective (Critical Competency)	
The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.	
2. Result (Expected level of advancement)	
1. The majority of veterinary and other professional positions are not occupied by appropriately qualified personnel.	
2. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at central and state / provincial levels.	
3. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at the local (field) level.	
4. There is a systematic approach to defining job descriptions and formal appointment procedures for veterinarians and other professionals.	
5. There are effective management procedures for performance assessment of veterinarians and other professionals.	
3. Description of the activity	
Strategy of the activity	The VCN and FDL must have information on the repartition of veterinarians in the country (cf. III.5). The staff of each state and the field level must be adapted to the relevant staffing requirements. Carrying out a study on human resources. -
Description of the tasks – **Year 1**	Carry out the study on the situation of human resources, including an estimation of the number of vets required for each post and function in order to design a prospective plan to adapt human resources to all the missions of the VS. Keep a database with the distribution of the staff by federal and state level including at least the name, function, and location of the working area and how many years remain until retirement.
Description of the tasks – **Year 2**	Implement a human resources plan. Improve the veterinary database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities. (see CC I.11)
Description of the tasks – **Year 3**	Implement the human resources plan. Improve the veterinary database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities). (see CC I.11) Evaluate the plan.
Description of the tasks – **Year 4**	Implement the human resources plan. Improve the veterinary database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities). (see CC I.11)
Description of the tasks – **Year 5**	Implement the human resources plan. Improve the veterinary database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities). (see CC I.11)
Objectively verifiable indicators	Database of human resources, database of the area and the livestock under veterinary control.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	See CC I.3
Legislation (IV.1, 2, 3)	The regulation framework should ensure that the selection of job posts in VS has specific criteria for the initial training required and the appropriate adjustment to the performance of veterinary activity needed in VS.
Communication (III.1)	
Consultation (III.2)	To establish a field veterinary network, it is important to consult the LGA at state level.
Official representation (III.3)	
Procedures	
Information management	The DVS has to supply the information for the database.

Total estimation of the staffing required for the Veterinary Services							
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	Delegated activities	General management	**Total**
Veterinarians	34	680	402		720	169	2 005
Other university degree	11					8	19
Veterinary para-professionals	135	1 360	900		1 440	61	3 896
Support staff	5	80	1			81	167

I.1.B. Scientific and technical staffing.

Veterinary para-professionals and other technical staff

1. Specific objective (Critical Competency)	
The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.	
2. Result (Expected level of advancement)	
1. The majority of technical positions are not occupied by personnel holding technical qualifications.	
2. The majority of technical positions at central and state / provincial levels are occupied by personnel holding technical qualifications.	
3. The majority of technical positions at the local (field) level are occupied by personnel holding technical qualifications.	
4. The majority of technical positions are effectively supervised on a regular basis.	
5. There are effective management procedures for formal appointment and performance assessment of veterinary para-professionals.	
3. Description of the activity	
Strategy of the activity	Recommended actions: - Registration of veterinary para-professionals with VCN (cf. III.5). - Organisation of supervision of veterinary para-professionals and reporting of this supervision.
Description of the task – **Year 1**	Keep a database with the distribution of the veterinary para-professionals staff by federal and state level including at least name, function, location of working area and how many years left to get retired. Estimation of the required number of veterinary para-professionals by post and function and establish a plan to reach that goal.
Description of the task – **Year 2**	Implement the human resources plan. Improve the database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities).
Description of the task – **Year 3**	Implement the human resources plan. Improve the database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities).
Description of the task – **Year 4**	Implement the human resources plan. Improve the database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities).
Description of the task – **Year 5**	Implement the human resources plan. Improve the database including farms and livestock in each LGA (could be implemented during vaccination and during active surveillance activities).
Objectively verifiable indicators	Database of human resources, database of area and livestock under veterinary control.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	Cf. I.3
Legislation (IV.1, 2, 3)	The regulatory framework should include definitions of different categories of veterinary paraprofessionals, their training levels, the tasks and activities assigned, and the supervisory mechanism of its activities.
Communication (III.1)	
Consultation (III.2)	It is important to maintain closer consultation and cooperation between the VS, NBTE and NVC to establish the initial training needs on the level of VS in the country (quantity and quality, i.e. how many veterinary para-professionals are needed to perform the tasks planned). Cf I.2B
Official representation (III.3)	
Procedures	Develop procedures to supervise the activities of veterinary paraprofessionals. Cf I.11
Information management	Database with the distribution of the veterinary para-professionals staff by federal and state levels including at least the name, function, location of the working area, and how many yearsremain until retirement.

I.2. Competencies of veterinarians and veterinary para-professionals
I.2.A. Professional competencies of veterinarians

1. Specific objective (Critical Competency)	
The capability of VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.	
2. Result (Expected level of advancement)	
1. The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.	
2. The veterinarians' practices, knowledge and attitudes are of a uniform standard that usually allow for accurate and appropriate clinical and administrative activities of the VS.	
3. The veterinarians' practices, knowledge and attitudes usually allow undertaking all professional/technical activities of the VS (e.g. epidemiological surveillance, early warning, public health, etc.).	
4. The veterinarians' practices, knowledge and attitudes usually allow undertaking specialized activities as may be needed by the VS.	
5. The veterinarians' practices, knowledge and attitudes are subject to regular updating, or international harmonisation, or evaluation.	
3. Description of the activity	

Strategy of the activity	**Recommendations :**
	• Increase the links between the veterinary faculty and FDL
	• Estimation of future veterinary graduates' needs in collaboration with VCN
	• Audit of the Veterinary Faculty to :
	  • Determine the required investment
	  • Analyze the evolution of courses to improve the development of rural practices: opportunities for some specialized courses
	  • Analyse the capacity to carry out continuing education.
	  • Optimize exchanges with VS and stakeholdersEstimate the capacity to carry out research driven by the country**.**

Description of the task – **Year 1**	Audit of the Veterinary Faculty.Establish a committee group with the Veterinary Faculty and relevant research institutes (such as NVRI) lead by FDL to plan, design and carry out research adapted by to the country. Establish what courses are needed considering the objectives of VS.
Description of the task – **Year 2**	Evaluate and make changes for next year. Consolidate the process of harmonising the curriculum.
Description of the task – **Year 3 – 4**	Evaluate and make changes for next year.
Objectively verifiable indicators	Result of the audit, minutes of the committee research.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	It is important to maintain closer consultation and cooperation between the VS, Veterinary Faculty and NVC to establish the initial training needs on VS level in the country (quantity and quality, i.e. how many veterinarians are needed to perform the tasks planned).
Official representation (III.3)	
Procedures	
Information management	

MANAGEMENT OF VETERINARY SERVICES - 1 / I.2.A. Professional competencies of veterinarians						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Initial training (nb of students / year)			20 000			
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)		50,0	350			17 500
International expertise (weeks/5 years)		2,0	10 250			20 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure						**38 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		50	80		4 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		1	3 000		3 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**7 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***7 000***	***38 000***
Total in	***NGN***				***1 050 000***	***5 700 000***

I.2. Competencies of veterinarians and veterinary para-professionals

I.2.B. Competencies of veterinary para-professionals

1. Specific objective (Critical Competency)		
The capability of VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.		
2. Result (Expected level of advancement)		
1. The majority of veterinary para-professionals have no formal entry-level training.		
2. The training of veterinary para-professionals is of a very variable standard and allows the development of only limited animal health competencies.		
3. The training of veterinary para-professionals is of a uniform standard that allows the development of only basic animal health competencies.		
4. The training of veterinary para-professionals is of a uniform standard that allows the development of some specialist animal health competencies (e.g. meat inspection).		
5. The training of veterinary para-professionals is of a uniform standard and is subject to regular evaluation and/or updating.		
3. Description of the activity		
Strategy of the activity		The collaboration between NBTE and VCN must be strengthened to define the curriculum of veterinary para-professionals and to promote accreditation of training as a technician on animal health and VPH. Veterinary para-professionals recruited by VS at all levels have to be trained in accredited colleges.
Description of the task	**Year 1**	Establish a work group with the NBTE and VCN to inventory all the colleges involved in training of veterinary para-professionals to assess their curriculum and their capacities, and plan and design the curriculum needed. Develop work group with the NBTE, VCN to accredited colleges considering the designed plan.
	Year 2-5	Evaluate and make changes for next year.
Objectively verifiable indicators		Curriculum, college's accreditation.
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		It is important to maintain closer consultation and cooperation between the VS, NBTE and VCN.
Official representation (III.3)		
Procedures		
Information management		

MANAGEMENT OF VETERINARY SERVICES - 2 / I.2.B. Competencies of veterinary para-professionals						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Initial training (nb of students / year)			3 333			
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		30	80		2 400	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		3	1 500		4 500	
Kits / reagents / vaccines						
Sub-total Consumable resources					**6 900**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***6 900***	
Total in	***NGN***				***1 035 000***	

I-3. Continuing education

1. Specific objective (Critical Competency)

The capability of the VS to maintain and improve the competence of their personnel in terms of relevant information and understanding; measured in terms of the implementation of a relevant training programme.

2. Result (Expected level of advancement)

1.	The VS have no access to continuing veterinary, professional or technical education.
2.	The VS have access to continuing education (internal and/or external programmes) on an irregular basis but it does not take into account needs, or new information or understanding.
3.	The VS have access to continuing education that is reviewed annually and updated as necessary, but it is implemented only for some categories of the relevant personnel.
4.	The VS have access to continuing education that is reviewed annually and updated as necessary, and it is implemented for all categories of the relevant personnel.
5.	The VS have up-to-date continuing education that is implemented for all relevant personnel and is submitted to periodic evaluation of effectiveness.

3. Description of the activity

Strategy of the activity		Continuing education programmes have to be extended to state level, LGA and also to private veterinarians.
Description of the task	**Year 1**	Establish a working group between FDL and VCN with the participation of the Veterinary Faculty to systematically review the needs for continuing education at each level. Design a continuing education programme at each level (federal, state, LGA ...). Design a mechanism to evaluate the effectiveness and the impact of a continuing education programme. A mechanism to share these reviews could be organized through VCN to develop and adapt the offer of continuing education.
	Year 2-5	Implement the continuing education programme. Implement the evaluation of the programme.
Objectively verifiable indicators		Continuing education work group report, programme and evaluation.

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Enforcement of the regulation concerning continuing education
Communication (III.1)	Must be assured that the information on continuing education - programmes, schedule, priorities, is available in time for potential trainees.
Consultation (III.2)	The continuing education working group should consult the VS staff to ensure that training meets their needs and expectations.
Official representation (III.3)	
Procedures	
Information management	The human resources service must maintain a database including information about staff access to continuing training, functions, and activities, besides the implementation of the process evaluation.

MANAGEMENT OF VETERINARY SERVICES - 3 / I-3. Continuing education						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		25	80		2 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		3	1 500		4 500	
Kits / reagents / vaccines						
Sub-total Consumable resources					**6 500**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***6 500***	
Total in	***NGN***				***975 000***	

I-4. Technical independence

1. Specific objective (Critical Competency)
The capability of the VS to carry out their duties with autonomy and free from commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the OIE (and of the WTO SPS Agreement where applicable).

2. Result (Expected level of advancement)	
1.	The technical decisions made by the VS are generally not based on scientific considerations.
2.	The technical decisions take into account the scientific evidence, but are routinely modified to conform to non-scientific considerations.
3.	The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
4.	The technical decisions are based only on scientific evidence and are not changed to meet non-scientific considerations.
5.	The technical decisions are made and implemented in full accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations where applicable).

3. Description of the activity		
Strategy of the activity		The target objective is to consolidate level 3. This means: - Strengthening the use of the results of risk analysis in decision making. See II.3 - Consolidation of the chain of command in order to add a homogeneous implementation of the national veterinary policy. See I.6 - Establishment of formal procedures and adequate training of staff. See I.3 Veterinarians' salaries in VS must be harmonized between the states to allow the same implication of the staff and to avoid any pressure. Appropriate technical independence will arise as a result of performance in other CC.
Description of the task	**Year 1**	
	Year 2	
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		

4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

MANAGEMENT OF VETERINARY SERVICES - 4 / I-4. Technical independence

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

I-5. Stability of structures and sustainability of policies

1. Specific objective (Critical Competency)	
The capability of the VS structure and/or leadership to implement and sustain policies over time.	
2. Result (Expected level of advancement)	
1. Substantial changes to the organisational structure and/or leadership of the public sector of the VS frequently occur (e.g. annually) resulting in lack of sustainability of policies.	
2. The organisational structure and/or leadership of the public sector of the VS is substantially changed each time there is a change in the political leadership and this has negative effects on sustainability of policies.	
3. Significant changes to the organisational structure and/or leadership of the public sector of the VS occur rarely, but this stability does not have a positive impact on the sustainability of policies.	
4. Some changes occur in the organisational structure and/or leadership of the public sector of the VS following a change in the political leadership, but these have little or no negative effect on sustainability of policies.	
5. The organisational structure and leadership of the public sector of the VS are generally stable. Modifications are based on an evaluation process, with positive effect on the sustainability of policies.	
3. Description of the activity	
Strategy of the activity	The main objective is to consolidate level 4.
Description of the task – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

MANAGEMENT OF VETERINARY SERVICES - 5 / I-5. Stability of structures and sustainability of policies

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

I-6. Coordination capability of the Veterinary Services
A. Internal coordination (chain of command)

1. Specific objective (Critical Competency)

The capability of the VS to coordinate its resources and activities (public and private sectors) with a clear chain of command, from the central level (the CVO) to the field level of the VS in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).

2. Result (Expected level of advancement)

1.	There is no formal internal coordination and the chain of command is not clear.
2.	There are internal coordination mechanisms for some activities but the chain of command is not clear.
3.	There are internal coordination mechanisms and a clear and effective chain of command for some activities.
4.	There are internal coordination mechanisms and a clear and effective chain of command at the national level for most activities.
5.	There are internal coordination mechanisms and a clear and effective chain of command for all activities and these are periodically reviewed/audited and updated.

3. Description of the activity

Strategy of the activity		In the federal situation of Nigeria, the chain of command is dependant on the confidence between FDL and DVS. Therefore, this confidence can be improved through the support of the FLDC (training, tools as guide or database, staff close to the DVS…). This requires strengthening the chain of command by: - Strengthening the staff at the FDL at state level to coordinate more closely the activities with the DVS and ensure rapid collection of all relevant information (See I.11); - Strengthening coordination through a strategy supporting DVS by recruiting staff at FDL at state level. - Regular meetings with each DVS in their state and with all DVS. This CC is linked with the CC I.11.
Description of the task	**Year 1**	Recruiting at state level. Meeting with each DVS and with all DVS.
	Year 2-5	Meeting with each DVS and with all DVS.
Objectively verifiable indicators		Staff of the FDL at state level in charge of VS activities, meetings with DVS, number of notification of disease in conformity with the procedures.

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

MANAGEMENT OF VETERINARY SERVICES - 6 /I-6.A. Coordination capability of the Veterinary Services: Internal coordination (chain of command)						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		3 708				
Existing building to be maintained (m2)		3 708	4	1	14 832	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars		20	23 333	5	93 333	
Number of 4x4 vehicles		60	40 000	5	480 000	
boats						
Telecommunication equipment set		250	1 200	5	60 000	
Office equipment set		270	2 000	3	180 000	
Other specific equipment						
Sub-total Material investments					**828 165**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians		165,0	15 000		2 475 000	
Other university degree		4,0	10 000		40 000	
Veterinary para-professionals		60,0	6 000		360 000	
Support staff		80,0	3 000		240 000	
Sub-total Salaries					**3 115 000**	
Consumable resources / year						
Administration			20%		623 000	
Travel allowances						
staff within the country (man-days) / year		200	80		16 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year		400 000	0,07		27 733	
Km or miles 4x4 vehicle / year		1 500 000	0,13		195 000	
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**861 733**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***4 804 899***	
Total in	***NGN***				***720 734 800***	

I-6. Coordination capability of the Veterinary Services
B. External coordination

1. Specific objective (Critical Competency)
The capability of the VS to coordinate its resources and activities (public and private sectors) at all levels with other relevant authorities[8] as appropriate, in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).

2. Result (Expected level of advancement)	
1.	There is no coordination.
2.	There are informal or irregular coordination mechanisms for some activities, with an unclear chain of command.
3.	There are coordination mechanisms with a clear chain of command for some activities, but these are not coordinated / implemented throughout the country.
4.	There are coordination mechanisms with a clear chain of command at the national level for most activities, and these are uniformly implemented throughout the country.
5.	There are agreed coordination mechanisms that can be implemented as necessary to address all activities.

3. Description of the activity		
Strategy of the activity		The recommended action is the development of formal coordination between NAFDAC, NAQS, VCN and other relevant institutions, including information sharing and the procedures for decision making in the VS area.
Description of the task	**Year 1**	
	Year 2	
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		

4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

[8] Relevant authorities include other ministries and competent authorities, national agencies and decentralised institutions.

MANAGEMENT OF VETERINARY SERVICES - 7 / I-6.B. Coordination capability of the Veterinary Services: External coordination						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

I-7. Physical resources

1. Specific objective (Critical Competency)	
The access of the VS to relevant physical resources including buildings, transport telecommunications, cold chain, and other relevant equipment (e.g. computers).	
2. Result (Expected level of advancement)	
1. The VS have no or unsuitable physical resources at almost all levels and maintenance of existing infrastructure is poor or non-existent.	
2. The VS have suitable physical resources at national (central) level and at some regional levels, and maintenance and replacement of obsolete items occurs only occasionally.	
3. The VS have suitable physical resources at national, regional and some local levels and maintenance and replacement of obsolete items occurs only occasionally.	
4. The VS have suitable physical resources at all levels and these are regularly maintained.	
5. The VS have suitable physical resources at all levels (national, sub-national and local levels) and these are regularly maintained and updated as more advanced and sophisticated items become available.	
3. Description of the activity	
Strategy of the activity	The targeted result can be achieved if the PVS Gap Analysis is applied and if there is a commitment of the states and federal level to ensure the relevant resources for VS (with eventually the support of donors). An internal study to assess the physical resources (inventory) and the needs to invest at each level (state, federal, LGA) must be necessary to complete the budget for investment.
Description of the tasks – **Year 1**	Internal study on physical resources.
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	Inventory of the resources at each level.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

Total estimation of physical resources required for the Veterinary Services						
	Trade	Animal health	Veterinary Public Health	Veterinary laboratories	General management	**Total**
Buildings (m2)	**1 295**	**24 480**	**4 045**		**3 868**	**33 688**
Existing building to be maintained (m2)	1 295	24 480	4045		3 868	33 688
Existing building to be renovated (m2)	-					
Building to be build (m2)	-					
Transport						
Number of motorbikes	-	2 040	400			2 440
Number of cars	12		1		21	34
Number of 4x4 vehicles	16				63	79
boats	-					
	-					
Telecommunication equipment set	48	680	403		261	1 392
Office equipment set	88	1 360	453		281	2 182
Other specific equipment in ref. currency	79 167	6 800	200 000	2 800	68 333	357 100

I-8. Operational funding

1. Specific objective (Critical Competency)	
The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure.	
2. Result (Expected level of advancement)	
1. Funding for the VS is neither stable nor clearly defined but depends on resources allocated irregularly.	
2. Funding for the VS is clearly defined and regular, but is inadequate for their required base operations (i.e. disease surveillance, early detection and rapid response and veterinary public health)	
3. Funding for the VS is clearly defined and regular, and is adequate for their base operations, but there is no provision for new or expanded operations.	
4. Funding for new or expanded operations is on a case-by-case basis, not always based on risk analysis and/or cost benefit analysis.	
5. Funding for all aspects of VS activities is adequate; all funding is provided under full transparency and allows for full technical independence, based on risk analysis and/or cost benefit analysis.	
3. Description of the activity	
Strategy of the activity	The targeted result is achievable if the PVS Gap Analysis is applied. It would be good to develop guidelines to support the states in defining their budget in order to be able to compare the contribution of each state to the VS budget.
Description of the tasks – **Year 1**	Development of guidelines for the budget.
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

I-9. Emergency funding

1. Specific objective (Critical Competency)		
The capability of the VS to access extraordinary financial resources in order to respond to emergency situations or emerging issues; measured by the ease of which contingency and compensatory funding (i.e. arrangements for compensation of producers in emergency situations) can be made available when required.		
2. Result (Expected level of advancement)		
1. No contingency and compensatory funding arrangements exist and there is no provision for emergency financial resources.		
2. Contingency and compensatory funding arrangements with limited resources have been established, but these are inadequate for expected emergency situations (including emerging disease issues).		
3. Contingency and compensatory funding arrangements with limited resources have been established; additional resources for emergencies may be approved but approval is through a political process.		
4. Contingency and compensatory funding arrangements with adequate resources have been established, but in an emergency situation, their operation must be agreed through a non-political process on a case-by-case basis.		
5. Contingency and compensatory funding arrangements with adequate resources have been established and their rules of operation documented and agreed with stakeholders.		
3. Description of the activity		
Strategy of the activity		The targeted result can be achieved if the procedure ensures a rapid answer to mobilise, if necessary, the fund from NEMA and the ecological fund.
Description of the tasks	**Year 1**	Negotiate a procedure for rapid answers.
	Year 2	
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		
Official representation (III.3)		
Procedures		
Information management		

I-10.Capital investment

1. Specific objective (Critical Competency)	
The capability of the VS to access funding for basic and additional investments (material and non material) that lead to a sustained improvement in the VS operational infrastructure.	
2. Result (Expected level of advancement)	
1. There is no capability to establish, maintain or improve the operational infrastructure of the VS.	
2. The VS occasionally develops proposals and secures funding for the establishment, maintenance or improvement of operational infrastructure but this is normally through extraordinary allocations.	
3. The VS regularly secures funding for maintenance and improvements of operational infrastructure, through allocations from the national budget or from other sources, but there are constraints on the use of these allocations.	
4. The VS routinely secures adequate funding for the necessary maintenance and improvement in operational infrastructure.	
5. The VS systematically secures adequate funding for the necessary improvements in operational infrastructure, including with participation from stakeholders as required.	
3. Description of the activity	
Strategy of the activity	The targeted result is achievable if the PVS Gap Analysis is applied.
Description of the tasks – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

I-11. Management of resources and operations

1. Specific objective (Critical Competency)	
The capability of the VS to document and manage their resources and operations in order to analyze, plan and improve both efficiency and effectiveness.	
2. Result (Expected level of advancement)	
1. The VS have some records or documented procedures, but these do not provide for adequate management of resources and operations.	
2. The VS routinely use records and/or documented procedures in the management of resources and some operations, but these do not provide for adequate management, analysis, control or planning.	
3. The VS have comprehensive records, documentation, and management systems and they regularly use records and documented procedures in the management of resources and operations, providing for the control of effectiveness and the conduct of analysis and planning.	
4. The VS have adequate management skills, including the capacity to analyse and improve efficiency and effectiveness.	
5. The VS have fully effective management systems which are regularly audited and permit proactive continuous improvement of efficiency and effectiveness.	
3. Description of the activity	
Strategy of the activity	This CC was not evaluated during the PVS Evaluation mission. The FDL and the state DVS need to have updated and relevant information in order to improve the management of their resources and operations.
Description of the tasks – **Year 1**	Audit of the existing information procedures and flows at federal and state levels Draft the specifications of the VSIMS and validate it the FDL, the DVS and the relevant authorities Establish a functional Veterinary Services Information Management System (VSIMS). This activity will take into account the need to ensure compatibility with the relevant information systems at regional and international levels Develop formal coordination and consultation procedures between the FDL and the states, including regular visits between CVO and DVS
Year 2	Implement the VSIMS
Year 3	Evaluate the VSIMS Update the VSIMS
Year 4	Monitor the VSIMS
Year 5	Monitor the VSIMS
Objectively verifiable indicators	Audit report; VSIMS
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Update the regulatory framework if needed
Communication (III.1)	Promote the importance of good VSIMS
Consultation (III.2)	Improve consultation between FDL and DVS
Official representation (III.3)	
Procedures	Update the procedures
Information management	

MANAGEMENT OF VETERINARY SERVICES - 8 / I-11. Management of resources and operations						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Databases (VSIMS)		1	1 000 000	15	66 667	666 667
Sub-total Material investments					**66 667**	**666 667**
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		150,0	144		21 667	
National expertise (days/5 years)		100,0	350			35 000
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**21 667**	**35 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		100	80		8 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Maintenance of databases		1	150 000		150 000	
Sub-total Consumable resources					**158 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***246 333***	***701 667***
Total in	***NGN***				***36 950 000***	***105 250 000***

II-1. Veterinary laboratory diagnosis

1. Specific objective (Critical Competency)

The authority and capability of the VS to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products.

2. Result (Expected level of advancement)

1.	Disease diagnosis is almost always conducted by clinical means only, with laboratory diagnostic capability being generally unavailable.
2.	For major zoonoses and diseases of national economic importance, the VS have access to and use a laboratory to obtain a correct diagnosis.
3.	For other zoonoses and diseases present in the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
4.	For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/or that could enter the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
5.	In the case of new and emerging diseases in the region or world, the VS have access to and use a network of national or international reference laboratories (e.g. an OIE Reference Laboratory) to obtain a correct diagnosis.

3. Description of the activity

Strategy of the activity		With the NVRI, the VS are quite advanced at level 4, taking into account the relationships developed by NVRI with several international laboratories, which allows them to send samples for tests on diseases not present in the country. The country has also many other laboratories (public and private) involved in animal health and food safety testing. However their capacities are often limited. . Some investments are required in field laboratories, but, this was not possible to assess during the mission. Furthermore, the public laboratories need funding for reagents, kits and all other consumables. The budget for tests is indicated in the corresponding cost estimate cards. The budget of this activity card only concerns the recommended activities.
Description of the tasks	**Year 1**	Carry out an inventory of field laboratories Preparation of regulatory framework in consultation with NVRI and other field laboratories including private laboratories, to improve notification of animal diseases. All veterinary laboratories would need to be assessed at the state VS and the FDL (scope of activities, human resources, and head) Definition of procedures for reporting diseases by laboratories Definition of an investment plan (not included in the budget)
	Year 2	Definition of harmonized SOP for testing for all field laboratories (including state labs, VTH laboratories, NVRI satellite labs, private labs, involved in field activities) with the coordination of NVRI and the collaboration of other relevant international institutions Organisation of training programmes for capacity building of field laboratory staff Monitor laboratory activities
	Year 3	Monitor laboratory activities Organisation of training for field laboratory staff
	Year 4	Monitor laboratory activities Organisation of training for field laboratory staff
	Year 5	Monitor laboratory activities Evaluation of the actions
Objectively verifiable indicators		Inventory of field laboratories, SOP for reporting and for testing, trainings.

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	Organisation training for field laboratory staff
Legislation (IV.1, 2, 3)	Regulatory framework on laboratory activities.
Communication (III.1)	
Consultation (III.2)	Consultations with laboratories
Official representation (III.3)	
Procedures	Procedures on reporting and testing
Information management	Database on notifiable diseases.

VETERINARY LABORATORIES - 1 / CC: II.1. Veterinary laboratory diagnosis						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		100,0	144		14 444	
National expertise (days/5 years)		30,0	350			10 500
International expertise (weeks/5 years)		2,0	10 250			20 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**14 444**	**31 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		200	80		16 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)	(30 pers)	1	2 000		2 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**18 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***32 444***	***31 000***
Total in	***NGN***				***4 866 667***	***4 650 000***

II-2. Laboratory quality assurance

1. Specific objective (Critical Competency)

The quality of laboratories (that conduct diagnosis testing and analysis for chemical residues, antimicrobial residues, toxins, or tests for biological efficacy, etc.) as measured by the use of formal QA systems and participation in relevant proficiency testing programmes.

2. Result (Expected level of advancement)

1.	No laboratories used by the public sector VS are using formal quality assurance systems.
2.	Some laboratories used by the public sector VS are using formal quality assurance systems.
3.	All laboratories used by the public sector VS are using formal quality assurance systems.
4.	All the laboratories used by the public sector VS and most or all private laboratories are using formal quality assurance systems.
5.	All the laboratories used by the public sector VS and most or all private laboratories are using formal quality assurance programmes that meet OIE, ISO 17025, or equivalent QA standard guidelines.

3. Description of the activity

Strategy of the activity		- NVRI central laboratory and the laboratory of NAFDAC have started developing a Quality Management System (QMS) to be accredited by an international accreditation body (member of EA). Accordingly, there is a need to develop and implement the appropriate standards of the QMS in both laboratories. The experience acquired by both accredited laboratories could be used for other laboratories to ensure the quality of tests. Proficiency tests must be developed in the country by NVRI.
Description of the tasks	**Year 1**	Support the development of QMS for NVRI and NAFDAC (with supporting expertise, including the Standards Organisation of Nigeria). Organisation of proficiency tests and evaluation of results with the relevant laboratories.
	Year 2	Support the development of QMS for NVRI and NAFDAC (with supporting expertise). Organisation of proficiency tests and evaluation of results with the relevant laboratories.
	Year 3	Accreditation of the QMS of NVRI and NAFDAC by an international body. Organisation of proficiency tests and evaluation of results with the relevant laboratories.
	Year 4	Training programme to develop QMS in the other laboratories. Organisation of proficiency tests and evaluation of results with the relevant laboratories.
	Year 5	Training programme to develop QMS in the other laboratories. Organisation of proficiency tests and evaluation of results with the relevant laboratories.
Objectively verifiable indicators		Accreditation of NVRI and NAFDAC, results of the proficiency tests, trainings.

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	Training on quality management.
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	Procedure for QMS for laboratories.
Information management	

VETERINARY LABORATORIES - 2 / CC: II.2. Laboratory quality assurance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Budget for standards		2	7 000	5	2 800	
Sub-total Material investments					**2 800**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		50,0	144		7 222	
National expertise (days/5 years)		200,0	350			70 000
International expertise (weeks/5 years)		8,0	10 250			82 000
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**7 222**	**152 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		30	80		2 400	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Consumables for proficiency tests		3	1 500		4 500	
Sub-total Consumable resources					**6 900**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***16 922***	***152 000***
Total in	***NGN***				***2 538 333***	***22 800 000***

II-3. Risk analysis

1. Specific objective (Critical Competency)		
The authority and capability of the VS to base its risk management decisions on a scientific assessment of the risks.		
2. Result (Expected level of advancement)		
1.	Risk management decisions are not usually supported by scientific risk assessment.	
2.	The VS compile and maintain data but do not have the capability to systematically assess risks. Some risk management decisions are based on scientific risk assessment.	
3.	The VS can systematically compile and maintain relevant data and carry out risk assessment. Scientific principles and evidence, including risk assessment, generally provide the basis for risk management decisions.	
4.	The VS systematically conduct risk assessments in compliance with relevant OIE standards, and base their risk management decisions on the outcomes of these risk assessments.	
5.	The VS are consistent in basing sanitary decisions on risk analysis, and in communicating their procedures and outcomes internationally, meeting all their OIE obligations (including WTO SPS Agreement obligations where applicable).	
3. Description of the activity		
Strategy of the activity		The NADIS has acquired good experience in risk analysis. However, the risk analysis must be strengthened in the animal health area in order to design the different programmes to cope with risks linked to import of live animals products, and food safety hazards. The main difficulty in carrying out such risk analysis is to gather the relevant data needed (from fields, from other institutions…). Therefore, other relevant institutions (NAFDAC, NAQS) should have their risk analysis capacities strengthen. -
Description of the tasks	**Year 1**	Database of the FDL should be strengthen to gather all the relevant data from the field level (see I.11). Conception of the methodology for risk analysis involving the relevant institution. This methodology can be used also at the state level to strengthen their risk analysis capacity. Training of services and other institutions. Definition of the data and the information to be shared. between the FDL and the others institutions involved Definition of the main topics to carry out risk analysis.
	Year 2-5	Risk analysis Communication of the results
Objectively verifiable indicators		Results of risk analysis,
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		Training of services and other institutions on the concept of risk analysis
Legislation (IV.1, 2, 3)		
Communication (III.1)		Communication of the results to stakeholders
Consultation (III.2)		
Official representation		
Procedures		Guide for risk analysis
Information management		Data base on animal health

MANAGEMENT OF VETERINARY SERVICES - 9 / II-3. Risk analysis

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)		115				
Existing building to be maintained (m2)		115	4	1	460	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars		1	23 333	5	4 667	
Number of 4x4 vehicles		3	40 000	5	24 000	
boats						
Telecommunication equipment set		10	1 200	5	2 400	
Office equipment set		10	2 000	3	6 667	
Other specific equipment						
Sub-total Material investments					**38 193**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		15,0	144		2 167	
National expertise (days/5 years)		5,0	350			1 750
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**2 167**	**1 750**
Salaries / year						
Veterinarians	7,0	4,0	15 000		60 000	
Other university degree		1,0	10 000		10 000	
Veterinary para-professionals		1,0	6 000		6 000	
Support staff		1,0	3 000		3 000	
Sub-total Salaries					**79 000**	
Consumable resources / year						
Administration			20%		15 800	
Travel allowances						
staff within the country (man-days) / year		210	80		16 800	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year		20 000	0,07		1 387	
Km or miles 4x4 vehicle / year		75 000	0,13		9 750	
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		1	1 000		1 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**44 737**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***164 097***	***1 750***
Total in	***NGN***				***24 614 500***	***262 500***

II-4. Quarantine and border security

1. Specific objective (Critical Competency)

The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.

2. Result (Expected level of advancement)

1. The VS cannot apply any type of quarantine or border security procedures for animals or animal products with their neighbouring countries or trading partners.
2. The VS can establish and apply quarantine and border security procedures; however, these are generally based neither on international standards nor on a risk analysis.
3. The VS can establish and apply quarantine and border security procedures based on international standards, but the procedures do not systematically address illegal activities[9] relating to the import of animals and animal products.
4. The VS can establish and apply quarantine and border security procedures which systematically address legal pathways and illegal activities.
5. The VS work with their neighbouring countries and trading partners to establish, apply and audit quarantine and border security procedures which systematically address all risks identified.

3. Description of the activity

Strategy of the activity		Define the strategy with neighbouring countries to reduce illegal imports and monitor the exchange of animals. Define coordination between NAQS and NAFDAC on veterinary drug importation and food from animal origin imports. The budget relates to the corresponding activities. Concerning human and physical resources, a first approach has been carried out with NAQS and FDL, but the investment estimate and human resources must be confirmed or modified in accordance with the organisation system. The data in the table are based on a prudent hypothesis.
Description of the tasks	**Year 1**	Study the organisation of the border posts to optimize the services and determine human and physical resources required. The study must analyse the animal movement (per day, per week, per month, per year) and the way in which it is concentrated at the entry points of the country. It should also analyse the opportunity to use private facilities…. Establish the procedures for importation and inspection at border posts.Study tour in other countries.
	Year 2	Establish a database on border posts which facilitates the monitoring of the activities of each border post; it could be linked to the project of electronic certificates for importation; Finalise the procedures. Train staff at border posts, in particular regarding SOPs. Invest in facilities and recruitment following the results of the study. Consultation with neighbouring countries to harmonise SOPs and to improve information sharing procedures in order to reduce illegal activities.
	Year 3	Investment and implementation of databases and training of the relevant staff. Regular updating of SOPs based on risk analysis.
	Year 4	Consultation with neighbouring countries to reduce illegal activities. Regular updating…
	Year 5	Assessment of the activities.
Objectively verifiable indicators		Database, relevant indicators of border posts activities, SOPs, trainings, results of consultations with other countries (MoU).

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	Training of staff in border posts and NAQS.
Legislation (IV.1, 2, 3)	
Communication (III.1)	Information campaign on the mission of NAQS.
Consultation (III.2)	Consultation with importation companies and traders of live animals.
Official representation (III.3)	
Procedures	SOP for inspection at border posts.
Information management	Database for border posts and NAQS

[9] Illegal activities include attempts to gain entry for animals or animal products other than through legal entry points and/or using certification and/or other procedures not meeting the country's requirements.

TRADE - 1 / CC: II.4. Quarantine and border security

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)		1 175				
Existing building to be maintained (m2)		1 175	4	1	4 700	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars		12	23 333	5	56 000	
Number of 4x4 vehicles		13	40 000	5	104 000	
boats						
Telecommunication equipment set		40	1 200	5	9 600	
Office equipment set		80	2 000	3	53 333	
Other specific equipment						
Equipment for border post		19	50 000	12	79 167	554 167
Sub-total Material investments					**306 800**	**554 167**
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		250,0	144		36 111	
National expertise (days/5 years)		100,0	350			35 000
International expertise (weeks/5 years)		2,0	10 250			20 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**36 111**	**55 500**
Salaries / year						
Veterinarians	31,0	31,0	15 000		465 000	
Other university degree	10,0	10,0	10 000		100 000	
Veterinary para-professionals	55,0	55,0	6 000		330 000	
Support staff			3 000			
Sub-total Salaries					**895 000**	
Consumable resources / year						
Administration			20%		179 000	
Travel allowances						
staff within the country (man-days) / year		75	80		6 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year		3	3 600		10 800	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year		240 000	0,07		16 640	
Km or miles 4x4 vehicle / year		325 000	0,13		42 250	
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	5 000		5 000	
Consultation (number of 1 day meetings)		2				
Kits / reagents / vaccines						
Consummables for Border posts		19	3 000		57 000	
Sampling and testing at border posts		1 000	25		25 000	
Sub-total Consumable resources					**341 690**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***1 579 601***	***609 667***
Total in	***NGN***				***236 940 167***	***91 450 000***

II.5. Epidemiological surveillance

II.5.A. Passive epidemiological surveillance

1. Specific objective (Critical Competency)

The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations under their mandate.

2. Result (Expected level of advancement)

1.	The VS have no passive surveillance programme.
2.	The VS conduct passive surveillance for some relevant diseases and have the capacity to produce national reports on some diseases.
3.	The VS conduct passive surveillance in compliance with OIE standards for some relevant diseases at the national level through appropriate networks in the field, whereby samples from suspect cases are collected and sent for laboratory diagnosis with evidence of correct results obtained. The VS have a basic national disease reporting system.
4.	The VS conduct passive surveillance and report at the national level in compliance with OIE standards for most relevant diseases. Appropriate field networks are established for the collection of samples and submission for laboratory diagnosis of suspect cases with evidence of correct results obtained. Stakeholders are aware of and comply with their obligation to report the suspicion and occurrence of notifiable diseases to the VS.
5.	The VS regularly report to stakeholders and the international community (where applicable) on the findings of passive surveillance programmes.

3. Description of the activity

Strategy of the activity		The conditions for good passive surveillance are: - An effective field network to cover all the territory with veterinarians being aware of the relevant diseases to notify and appropriate ante and post mortem inspection; - A good chain of command from field to central level to report cases with all necessary information; - Coordination with the human health system for zoonoses; - Appropriate procedures for immediate notification of confirmed case from a suspected outbreak in order to report to OIE. Even if passive surveillance mainly concerns all notifiable diseases or suspected outbreaks, it is necessary to focus the information for field partners on the priority diseases (leaflets, procedures…): CBPP, PPR, brucellosis, tuberculosis; FMD, ND, ASF, rabies...
Description of the tasks	**Year 1**	Conception (or update) of general procedures for passive surveillance from diagnosis (clinical diagnosis and procedures to confirm diseases) to collection of data on the outbreaksand notification through the chain of command, using the experience acquired with RP and HPAI; Conception of specific procedures for 2 or 3 priority diseases; Consultation with private veterinarians to strengthen the network (with VCN). Improvement of the database for epidemiological surveillance.
	Year 2	Training programme on the first disease for all private veterinarians and field staff. Conception of specific procedures for 2 or 3 other priority diseases; Strengthen the coordination with DVS in staffing some federal veterinarians in charge of the coordination epidemiological surveillance activities at state level.
	Year 3	Training programme on diseases for all private veterinarians and field staff. Conception of specific procedures for 2 or 3 other priority diseases; Feed-back on results of epidemiological surveillance to private veterinarians, surveillance agents and local veterinary officers.
	Year 4	Training programme on disease for all private veterinarians and field staff. Conception of specific procedures for 2 or 3 other priority diseases Simulation exercise to test the reporting disease procedures in place.
	Year 5	Evaluation of the activities
Objectively verifiable indicators		Procedures for notification, results of passive surveillance, data on the network field, results of the simulation exercise.

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	Training of private veterinarians and field staff.
Legislation (IV.1, 2, 3)	Update regulatory framework, if required.
Communication (III.1)	Communication with farmers…
Consultation (III.2)	Regular consultation with stakeholders.
Official representation (III.3)	
Procedures	Procedures for reporting
Information management	Database for epidemiological surveillance.

ANIMAL HEALTH - 1 / CC: II.5.A. Passive epidemiological surveillance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		1 500,0	144		216 667	
National expertise (days/5 years)		30,0	350			10 500
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**216 667**	**10 500**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		500	80		40 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		2	5 000		10 000	
Consultation (number of 1 day meetings)		37	1 500		55 500	
Kits / reagents / vaccines						
Sampling, testing		400	25		10 000	
Sub-total Consumable resources					**115 500**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***332 167***	***10 500***
Total in	***NGN***				***49 825 000***	***1 575 000***

II.5. Epidemiological surveillance
II.5.B. Active epidemiological surveillance

1. Specific objective (Critical Competency)	
The authority and capability of the VS to determine verify and report on the sanitary status of the animal populations under their mandate.	
2. Result (Expected level of advancement)	
1. The VS have no active surveillance programme.	
2. The VS conduct active surveillance for some relevant diseases (of economic and zoonotic importance) but apply it only in a part of susceptible populations and/or do not update it regularly.	
3. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases and apply it to all susceptible populations but do not update it regularly.	
4. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases, apply it to all susceptible populations, update it regularly and report the results systematically.	
5. The VS conduct active surveillance for most or all relevant diseases and apply it to all susceptible populations. The surveillance programmes are evaluated and meet the country's OIE obligations.	
3. Description of the activity	
Strategy of the activity	There is active surveillance in place for HPAI. Some others diseases must be actively surveyed: - TB: a programme on TB with Animal Health is on project with diagnosis both for humans and animals (with tuberculin). This project must be supported to improve the knowledge of the disease, which will complement passive surveillance at abattoirs. - Brucellosis: surveillance could be carried out on raw milk at processing units or dairy farms; - ASF: the objective may be to verify the prevalence in the targeted zone for eradication and, after, to survey the circulation of the virus in a buffer zone. Each active surveillance protocol has to be defined following a risk analysis and must be regularly updated with the results of previous year.
Description of the tasks – **Year 1**	Define of each active surveillance protocol. Set up the network in charge of carrying out the active surveillance. Analysis of results
Description of the tasks – **Year 2-5**	Provide information to stakeholders on the results obtained during the previous years. Update each active surveillance protocol and the network (if needed). Analysis of results
Objectively verifiable indicators	Results of active surveillance, information about meetings with stakeholders…
4- Possible link with cross-cutting competencies	
Continuing Education	
Legislation (IV.1, 2, 3)	
Communication (III.1)	Provide information to stakeholders on the results of the active surveillance campaigns.
Consultation (III.2)	
Official representation	
Procedures	
Information management	Database on active surveillance.

ANIMAL HEALTH - 2 / CC: II.5.B. Active epidemiological surveillance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		300,0	144		43 333	
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**43 333**	
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		200	80		16 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		2	1 000		2 000	
Kits / reagents / vaccines						
Sampling and tests (ASF, brucellosis, tuberculosis…)		36 000	4		144 000	
Sub-total Consumable resources					**162 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***205 333***	
Total in	***NGN***				***30 800 000***	

II-6. Early detection and emergency response

1. Specific objective (Critical Competency)	
The authority and capability of the VS to detect and respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).	
2. Result (Expected level of advancement)	
1. The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately.	
2. The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately.	
3. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command.	
4. The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases.	
5. The VS have national contingency plans for all diseases of concern through coordinated actions with all stakeholders through a chain of command.	
3. Description of the activity	
Strategy of the activity	- Any emergency plan needs an efficient chain of command from CVO to field level. This CC is linked with the CC II.5A and II.5B.
Description of the tasks – **Year 1**	Update regulatory framework to ensure that VS are able to mobilize emergency funds when required and in time compatible with the management of outbreaks Define of the contingency plan for any emerging disease. Training for the field staff and private veterinarians.
Year 2	Define of the contingency plan for specific diseases (HPAI, RP, ASF, FMD, PPR, CBPP, Rabies, ND…) Training.
Year 3	Training.
Year 4	Audit the procedures for emergency situations.
Year 5	
Objectively verifiable indicators	Contingency plans, training.

4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	Training of the field staff and veterinarians.
Legislation (IV.1, 2, 3)	Update the regulatory framework.
Communication (III.1)	Communication on outbreaks.
Consultation (III.2)	
Official representation (III.3)	
Procedures	Procedures in contingency plan.
Information management	Database on animal health

ANIMAL HEALTH - 3 / CC: II.6. Early detection and emergency response

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		170,0	144		24 556	
National expertise (days/5 years)		20,0	350			7 000
International expertise (weeks/5 years)			10 250			
Emergency funds (ASF)		1	15 000 000			15 000 000
Sub-total non material expenditure					**24 556**	**15 007 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		200	80		16 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		2	1 500		3 000	
Kits / reagents / vaccines						
Transport budget		1	10 000		10 000	
Sub-total Consumable resources					**29 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***53 556***	***15 007 000***
Total in	***NGN***				***8 033 333***	***2 251 050 000***

II-7. Disease prevention, control and eradication

1. Specific objective (Critical Competency)	
The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases.	
2. Result (Expected level of advancement)	
1. The VS have no authority or capability to prevent, control or eradicate animal diseases.	
2. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with little or no scientific evaluation of their efficacy and efficiency.	
3. The VS implement prevention, control and eradication programmes for some diseases and/or in some areas with scientific evaluation of their efficacy and efficiency.	
4. The VS implement prevention, control and eradication programmes for all relevant diseases but with scientific evaluation of their efficacy and efficiency of only some programmes.	
5. The VS implement prevention, control and eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency consistent with relevant OIE international standards.	
3. Description of the activity	
Strategy of the activity	The CC has not been assessed during the PVS Evaluation. The specific strategies for each priority diseases are as follow: - CBPP and PPR: carry out mass vaccination in order to reach 80% of the susceptible population to reduce the prevalence of the disease; a strategy for imported live ruminants must be defined in cooperation with other countries. - ASF: start eradication in a specific area in order to extend the area step by step. - ND: carry out vaccination in around 25% of the free-range birds (epidemiology unit – villages). Improve the quality of vaccination in commercial farms to reduce the outbreaks.
Description of the tasks – **Year 1**	Definition and measurement of indicators. CBPP and PPR vaccination campaigns Definition of the strategy for ASF and ND defining the indicators to evaluate the programmes
Description of the tasks – **Year 2-5**	CBPP and PPR vaccination campaigns Implementation of the ASF programme Implementation of the ND programme Evaluation of indicators and updating the strategy
Objectively verifiable indicators	Results of indicators, percentage of vaccinated animals…

4- Possible link with cross-cutting competencies	
Continuing Education	Training of the staff,
Legislation (IV.1, 2, 3)	Updating regulatory framework
Communication (III.1)	Communication on the results of the campaign
Consultation (III.2)	Consultation with the stakeholders before implementing the programmes and to assess the results
Official representation	
Procedures	Procedures for the campaigns
Information management	Database on vaccination campaigns.

ANIMAL HEALTH - 4 / CC: II.7. Disease prevention, control and eradication						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		24 480				
Existing building to be maintained (m2)		24 480	4	1	97 920	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes		2 040	400	3	272 000	
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set		680	1 200	5	163 200	
Office equipment set		1 360	2 000	3	906 667	
Other specific equipment						
equipment for veterinary clinics		680	50	5	6 800	
Sub-total Material investments					**1 446 587**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		80,0	144		11 556	
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**11 556**	
Salaries / year						
Veterinarians		680,0	15 000		10 200 000	
Other university degree			10 000			
Veterinary para-professionals		1 360,0	6 000		8 160 000	
Support staff		80,0	3 000		240 000	
Sub-total Salaries					**18 600 000**	
Consumable resources / year						
Administration			20%		3 720 000	
Travel allowances						
staff within the country (man-days) / year		100	80		8 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year		20 400 000	0,04		884 000	
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	10 000		10 000	
Consultation (number of 1 day meetings)		37	1 500		55 500	
Kits / reagents / vaccines						
Vaccines (PPR, CBPP, FMD)		145 010 000	0,038		5 510 380	
Vaccines (ND 30 million doses)		200 000 000	0,01		1 340 000	
Sub-total Consumable resources					**11 527 880**	
Delegated activities / year						
Sanitary mandate for vaccinations		1	9 500 000		9 500 000	
Sub-total Delegated activities					**9 500 000**	
Total in	***USD***				***41 086 022***	
Total in	***NGN***				***6 162 903 333***	

II-8. Food safety

A. Ante and post mortem inspection at abattoirs and associated premises (e.g. meat boning / cutting establishments and rendering plants)

1. Specific objective (Critical Competency)

The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at abattoirs and associated premises, including for assuring meat hygiene and for the collection of information relevant to livestock diseases and zoonoses. This competency also covers coordination with other authorities where there is shared responsibility for the functions.

2. Result (Expected level of advancement)

1.	Ante and post mortem inspection and collection of disease information (and coordination as required) are generally not undertaken in conformity with international standards.
2.	Ante and post mortem inspection and collection of disease information (and coordination as required) are undertaken in conformity with international standards only at export premises.
3.	Ante and post mortem inspection and collection of disease information (and coordination as required) are undertaken in conformity with international standards for export premises and for all abattoirs producing meat for distribution throughout the national market.
4.	Ante and post mortem inspection and collection of disease information (and coordination as required) are undertaken in conformity with international standards for export premises and for all abattoirs producing meat for distribution in the national and local markets
5.	Ante and post mortem inspection and collection of disease information (and coordination as required) are undertaken in conformity with international standards at all premises (including family and on farm slaughtering) and are subject to periodic audit of effectiveness.

3. Description of the activity

Strategy of the activity		This CC has not been directly assessed during the PVS in 2007. Even if it is not directly the mandate of the VS, support is needed to finance investment in infrastructure. The management of abattoirs must be improved. Public-private partnership may be developed (e.g., Lagos abattoir) The actions could also be applied for the poultry sector. The standards for market abattoirs have been defined.
Description of the tasks	**Year 1**	Update the legislation (Abattoirs Act) to enforce ante and post mortem inspection and introduce hygiene and safety requirements Assess current staff involved in meat inspection (numbers, skills) for adequate staffing. Develop standards for different kinds of abattoirs Consult with butchers. The way to improve communication between butchers and inspectors may be developed during these training programmes
	Year 2	Update the legislation Train inspectors and butchers (training on legislation, good practices and inspection methods).. Develop standards for different kind of abattoirs. The conception stage will be at state level. Consult with butchers.
	Year 3	Define SSOPs. Carry out training programmes
	Year 4	Evaluation of activities.
	Year 5	
Objectively verifiable indicators		Legislation updated, adequate staff (number, skills), SSOPs, investment programmes for abattoirs.

4- Possible link with cross-cutting competencies

Continuing Education	Training of inspectors and stakeholders
Legislation (IV.1, 2, 3)	Legislation on abattoirs
Communication (III.1)	
Consultation (III.2)	Consultation with butchers and managers of abattoirs
Official representation	
Procedures	SSOPs for abattoirs
Information management	Database to collect data from the abattoirs (diseases, condemnations, hygiene gaps…)

VETERINARY PUBLIC HEALTH - 1 / CC: II.8. Food safety: A. Ante and post mortem inspection at abattoirs and associated premises						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		4 000				
Existing building to be maintained (m2)		4 000	4	1	16 000	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes		400	400	3	53 333	
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set		400	1 200	5	96 000	
Office equipment set		450	2 000	3	300 000	
Other specific equipment						
Equipment for inspectors		2 000	500	5	200 000	
Sub-total Material investments					**665 333**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		2 000,0	144		288 889	
National expertise (days/5 years)		120,0	350			42 000
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**288 889**	**42 000**
Salaries / year						
Veterinarians		400,0	15 000		6 000 000	
Other university degree			10 000			
Veterinary para-professionals		900,0	6 000		5 400 000	
Support staff			3 000			
Sub-total Salaries					**11 400 000**	
Consumable resources / year						
Administration			20%		2 280 000	
Travel allowances						
staff within the country (man-days) / year		500	80		40 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year		4 000 000	0,04		173 333	
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	10 000		10 000	
Consultation (number of 1 day meetings)		2	1 500		3 000	
Kits / reagents / vaccines						
Ink, certificates, register		400	50		20 000	
Tests on meat micronbiology		1 000	30		30 000	
Sub-total Consumable resources					**2 556 333**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***14 910 556***	***42 000***
Total in	***NGN***				***2 236 583 333***	***6 300 000***

II-8. Food safety
B. Inspection of collection, processing and distribution of products of animal origin

1. Specific objective (Critical Competency)	
The authority and capability of the VS to implement manage and coordinate food safety measures on collection, processing and distribution of products of animals, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes. This competency also covers coordination with other authorities where there is shared responsibility for the functions.	
2. Result (Expected level of advancement)	
1. Implementation, management and coordination (as appropriate) are generally not undertaken in conformity with international standards.	
2. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purpose.	
3. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purpose and for products that are distributed throughout the national market.	
4. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purpose and for products that are distributed throughout the national and local markets.	
5. Implementation, management and coordination (as appropriate) are generally undertaken in full conformity with international standards only for products at all levels of distribution (including on farm processing and farm gate sale)	
3. Description of the activity	
Strategy of the activity	This CC has not been directly assessed during the PVS Evaluation in 2007. After discussion with the Nigerian VS, the priority sector would be the exportation of poultry and the second one the national dairy production. The poultry sector would be covered by the activities presented in the Critical Competency Card II.8A. Therefore, this Critical Competency Card only addresses the dairy sector activities (units processing raw milk)
Description of the tasks – **Year 1**	Define the strategy: analysis of ongoing and past experience in Nigeria and study tour (Kenya or India) with stakeholders mainly from the private sector. Consult with stakeholders
Year 2	Update regulations Define SOPS with the private sector sector involved in the collection, processing and distribution of milk products; Define the inspection system
Year 3	Train inspectors and relevant private sector staff Develop tests on brucellosis and other tests on raw milk.
Year 4	Follow-up
Year 5	Evaluation of the strategy
Objectively verifiable indicators	Strategy defined, updated regulation, SSOPs, training, results of tests on raw milk.

4- Possible link with cross-cutting competencies	
Continuing Education	Train inspectors and relevant private sector staff
Legislation (IV.1, 2, 3)	Update legislation on raw milk and its processing
Communication (III.1)	
Consultation (III.2)	Consult with farmers and processing units
Official representation	
Procedures	SSOPs to collect milk and processing.
Information management	

VETERINARY PUBLIC HEALTH - 2 / CC: II.8. Food safety: B. Inspection of collection, processing and distribution of products of animal origin						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		15,0	144		2 167	
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**2 167**	
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		20	80		1 600	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year		8	3 600		28 800	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	10 000		10 000	
Consultation (number of 1 day meetings)		2	1 000		2 000	
Kits / reagents / vaccines						
Test on raw milk (brucellosis)		1 000	3		3 000	
Sub-total Consumable resources					**45 400**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***47 567***	
Total in	***NGN***				***7 135 000***	

II-9. Veterinary medicines and biologicals

1. Specific objective (Critical Competency)

The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, i.e. the authorisation, registration, import, production, labelling, distribution, sale and use of these products.

2. Result (Expected level of advancement)

1.	The VS cannot regulate the usage of veterinary medicines and veterinary biologicals.
2.	The VS have some capability to exercise administrative control over veterinary medicines and veterinary biologicals.
3.	The VS exercise effective administrative control and implement quality standards for most aspects of the regulation of veterinary medicines and veterinary biologicals.
4.	The VS exercise comprehensive and effective regulatory control of veterinary medicines and veterinary biologicals.
5.	In addition to complete regulatory control, the VS systematically monitor for adverse reaction (pharmacovigilance) and take appropriate corrective steps. The control systems are subjected to periodic audit of effectiveness.

3. Description of the activity

Strategy of the activity		The situation of the veterinary medicine biologicals presents many gaps: distribution of unauthorised drugs, no control over distribution. The veterinary medicines and biologicals market is, first and foremost, a public health issue with risks of residues, and economic issues for livestock and the epidemiological network for surveillance, because the medicines and biologicals could form part of the revenue for veterinary practitioners. According to OIE standards, the VS must be deeply involved in the administrative and field control of the veterinary medicines and biologicals. In the case of Nigeria, NAFDAC has a mandate to regulate the registration and distribution of drugs including veterinary medicines. However, it seems necessary to establish strong coordination between NAFDAC and FDL (and VCN) concerning: - The policy of registration in order to take into account the needs for the animal policy of VS in Nigeria and the development of the livestock sector; - The regulation and the control of distribution. Furthermore, VS within state have the field network to control the conditions of distribution and the use of veterinary medicines.
Description of the tasks	**Year 1**	Ad-hoc groups and definition of the strategy assisted by international expertise Review of the current legislation from registration to the use of veterinary medicines, in order to take into account OIE requirements
	Year 2	Updating legislation Creation of the committee on veterinary medicines and biologicals involving the CVO and the head NAFDAC in order to improve coordination to carry out the field inspections from producers, importers, distribution and use. Some inspection should be carried out by both institutions when appropriate, as importers and distributions Definition of SOPs for field inspection validated by both institutions; and establish coordinated procedures for emergency situations or for prosecutions. Creation of a unit on veterinary medicines and biologicals in FDLin charge of veterinary medicines and biologicals working closely with NAFDAC and the states. This unit would also be in charge of coordinating field inspections and developing a database on veterinary medicines and biologicals
	Year 3	Updating legislation Procedures to share information and development of the database. Training of inspectors.
	Year 4	Training of inspectors. Perform field inspections
	Year 5	Assessment of the strategy
Objectively verifiable indicators		Defined strategy, coordination FDL/NAFDAC, database on veterinary medicines and biologicals with data on the market and the main operators, SOPs, training

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	Training of inspectors
Legislation (IV.1, 2, 3)	Updating legislation on veterinary medicines and biologicals.
Communication (III.1)	
Consultation (III.2)	Consultation with private sector involved in veterinary medicines and biologicals.
Official representation (III.3)	
Procedures	SOP on inspection
Information management	Database on veterinary drugs

VETERINARY PUBLIC HEALTH - 3 / CC: II.9. Veterinary medicines and biologicals						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		45				
Existing building to be maintained (m2)		45	4	1	180	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars		1	23 333	5	4 667	
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set		3	1 200	5	720	
Office equipment set		3	2 000	3	2 000	
Other specific equipment						
Sub-total Material investments					**7 567**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		34,0	144		4 911	
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**4 911**	
Salaries / year						
Veterinarians		2,0	15 000		30 000	
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff		1,0	3 000		3 000	
Sub-total Salaries					**33 000**	
Consumable resources / year						
Administration			20%		6 600	
Travel allowances						
staff within the country (man-days) / year		20	80		1 600	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year		1	3 600		3 600	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year		20 000	0,07		1 387	
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	5 000		5 000	
Consultation (number of 1 day meetings)		2	1 000		2 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**20 187**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***65 664***	
Total in	***NGN***				***9 849 667***	

II-10. Residue testing

1. Specific objective (Critical Competency)		
The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals, etc.		
2. Result (Expected level of advancement)		
1. No residue testing programme for animal products exists in the country.		
2. Some residue testing programme is performed but only for selected animal products for export.		
3. A comprehensive residue testing programme is performed for all animal products for export and some for domestic use.		
4. A comprehensive residue testing programme is performed for all animal products for export and/or internal consumption.		
5. The residue testing programme is subject to routine quality assurance and regular evaluation.		
3. Description of the activity		
Strategy of the activity		This CC has not been directly assessed during the PVS Evaluation in 2007. According to the situation of the veterinary medicines market, priority must be given to the testing of antibiotic residues and antiparasites. For antibiotic residues, a rapid testing method based on biological tests could be used. They are easy to implement and they are not expensive. As regards the antiparasites, the NAFDAC's laboratory seems to be well equipped to carry out the testing of some molecules, but there is a lack of training and reagents. Remark1: The results of the residue testing plan must be used for a communication campaign for consumers in order to put pressure on the actors of the market. These results will assist in the implementation of the strategy defined in II.9. Remark2: The selection of the biological test must be made taking into account the statistics on the main molecules sold in Nigeria. The antiparasite residues plan must be focused on the molecules most frequently used. The budget only includes the resources needed to carry out the samples and the tests.
Description of the tasks	**Year 1**	Define and set up the antibiotic residue testing plan on meat and milk by FDL and NAFDAC
	Year 2	Evaluate the results and update the antibiotic residue testing plan for year 2 Prepare the antiparasite residue plan with FDL and NAFDAC; the NAFDAC laboratory should be upgraded. Campaign of communication
	Year 3-5	Antibiotic residue testing plan Define and set up the antiparasite residue plan Communication campaign on the results of the residues testing plan.
Objectively verifiable indicators		Results of tests, communication campaign

4- Possible link with cross-cutting competencies	
Continuing Education	
Legislation (IV.1, 2, 3)	
Communication (III.1)	Results of the communication campaign on
Consultation (III.2)	Consultation with actors of the market
Official representation	
Procedures	
Information management	See data base on veterinary medicines

VETERINARY PUBLIC HEALTH - 4 / CC: II.10. Residue testing						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		10	80		800	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	50 000		50 000	
Consultation (number of 1 day meetings)		1	1 000		1 000	
Kits / reagents / vaccines						
Tests on antibiotics and antiparasites		2 000	28		56 000	
Sub-total Consumable resources					**107 800**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***107 800***	
Total in	***NGN***				***16 170 000***	

II-11. Emerging issues

1. Specific objective (Critical Competency)	
The authority and capability of the VS to identify in advance and take appropriate action in response to likely emerging issues under their mandate relating to the sanitary status of the country, public health, the environment, or trade in animals and animal products.	
2. Result (Expected level of advancement)	
1. The VS do not have procedures to identify in advance likely emerging issues.	
2. The VS monitor and review developments at national and international levels relating to emerging issues.	
3. The VS assess the risks, costs and/or opportunities of the identified emerging issues, including preparation of appropriate national preparedness plans. The VS have some collaboration with other agencies (e.g. human health, wildlife, and environment) and with stakeholders on emerging issues.	
4. The VS implement, in coordination with stakeholders, prevention or control actions due to an adverse emerging issue, or beneficial actions from a positive emerging issue. The VS have well-developed formal collaboration with stakeholders and other agencies (e.g. human health, wildlife and environment) and with stakeholders on emerging issues.	
5. The VS coordinate actions with neighbouring countries and trading partners to respond to emerging issues, including audits of each other's ability to detect and address emerging issues in their early stages.	
3. Description of the activity	
Strategy of the activity	Taking into consideration the recommended actions to strengthen the competencies II.3 (risk analysis) and to strengthen the VS policy, the VS will reach the targeted level 3. No specific action is needed. The unit in charge of risk analysis will have to identify the eventual new issues.
Description of the tasks – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

MANAGEMENT OF VETERINARY SERVICES - 10 / II-11. Emerging issues						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

II-12. Technical innovation

1. Specific objective (Critical Competency)		
The capability of the VS to keep up-to-date with the latest scientific advances and to comply with the standards of the OIE (and Codex Alimentarius Commission where applicable).		
2. Result (Expected level of advancement)		
1. The VS have only informal access to technical innovations, through personal contacts and external sources.		
2. The VS maintain a database of technical innovations and international standards, through subscriptions to scientific journals and electronic media.		
3. The VS have a specific programme to actively identify relevant technical innovations and international standards.		
4. The VS incorporate technical innovations and international standards into selected policies and procedures, in collaboration with stakeholders.		
5. The VS systematically implement relevant technical innovations and international standards.		
3. Description of the activity		
Strategy of the activity		The VS could use different sources of information to follow technical innovations: - Website of OIE, FAO, Codex, WHO and other international agencies (FSIS from USA, RAPID alert system from UE…) - Subscriptions to scientific newsletters and publications; - Scientific reviews carried out by veterinary faculties and ordered by the VS. The VS have to create a database to gather all this information and to diffuse it to states VS and other stakeholders. The VS, assisted from the local veterinary faculties, organise regular scientific seminars.
Description of the tasks	**Year 1**	Identify the relevant websites and subscription to publications and newsletters; Establishment of the database.
	Year 2	Subscription to websites and newsletters; Maintenance of the database. Scientific reviews
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		Database, subscriptions, diffusion of the scientific information
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		
Official representation (III.3)		
Procedures		
Information management		

MANAGEMENT OF VETERINARY SERVICES - 11/ II-12. Technical innovation

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)	(seminar)	1	2 000		2 000	
Kits / reagents / vaccines						
Subscription and review from Vet. Faculty		1	2 000		2 000	
Sub-total Consumable resources					**4 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***4 000***	
Total in	***NGN***				***600 000***	

II-13. Identification and traceability

A. Animal identification and movement control

1. Specific objective (Critical Competency)	
The authority and capability of the VS, normally in coordination with stakeholders, to identify animals under their mandate and trace their history, location and distribution for the purpose of animals disease control, food safety, or trade or any other legal requirements under the VS/OIE mandate.	
2. Result (Expected level of advancement)	
1. The VS do not have the authority or the capability to identify animals or control their movements.	
2. The VS can identify some animals and control some movements, using traditional methods and/or actions designed and implemented to deal with a specific problem (e.g. to prevent robbery).	
3. The VS implement procedures for animal identification and movement control for specific animal sub-population as required for disease control, in accordance with relevant international standards.	
4. The VS implement all relevant animal identification and movement control procedures, in accordance with relevant international standards.	
5. The VS carry out periodic audits of the effectiveness of their identification and movement control system.	
3. Description of the activity	
Strategy of the activity	Given the situation in Nigeria, it is necessary to carry out a preliminary study to define the objectives and the relevant strategy. For instance, it could be limited to the country's identification of the origin and control of movement from other countries, or identification of the State or LGA origin of the animals. For some specific farms (commercial farms), individual identification could be carried out. The question of the movement control of pigs also needs to be analysed in the area in which the eradication of AFS will begin. Indepth consultation with stakeholders is required to ensure their involvement in such programmes. The pilot phase in one area must foresee the actual difficulties before rolling it out over the entire country
Description of the task – **Year 1**	Strategic study to determine the objectives for identification and movement control and consultations (with stakeholders and states). Workshop on this topic
Year 2	Depending on the results of the workshop, definition of a strategic plan and the corresponding budget (at state and national levels).
Year 3	implementation of a pilot phase before extending it all over the country
Year 4	Evaluation and follow up of the pilot phase already implemented.
Year 5	Assessment of the pilot phase and update the plan (objectives and strategy) for each state and respective budget.
Objectively verifiable indicators	Results of the study, strategic plan, results of the pilot phase.

4- Possible link with cross-cutting competencies	
Continuing Education	Training for people involved in identification and movement control.
Legislation (IV.1, 2, 3)	Updating the legislation according to the defined strategy.
Communication (III.1)	Communication with animal owners and key stakeholders.
Consultation (III.2)	Consultation with stakeholders.
Official representation (III.3)	
Procedures (I.11)	Procedures for animal identification and movement control.
Information management (I.11)	Relevant database for animal identification with information about animals, farmers, location...

TRADE - 2 / CC: II.13. Identification and traceability A. Animal identification and movement control						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		120				
Existing building to be maintained (m2)		120	4	1	480	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles		3	40 000	5	24 000	
boats						
Telecommunication equipment set		8	1 200	5	1 920	
Office equipment set		8	2 000	3	5 333	
Other specific equipment						
Database for identification (not estimated)						
Sub-total Material investments					**31 733**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		680,0	144		98 222	
National expertise (days/5 years)		400,0	350			140 000
International expertise (weeks/5 years)		6,0	10 250			61 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**98 222**	**201 500**
Salaries / year						
Veterinarians		3,0	15 000		45 000	
Other university degree		1,0	10 000		10 000	
Veterinary para-professionals		80,0	6 000		480 000	
Support staff		5,0	3 000		15 000	
Sub-total Salaries					**550 000**	
Consumable resources / year						
Administration			20%		110 000	
Travel allowances						
staff within the country (man-days) / year		300	80		24 000	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year		75 000	0,13		9 750	
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	5 000		5 000	
Consultation (number of 1 day meetings)	workshop	40	2 000		80 000	
Kits / reagents / vaccines						
Earthtags and other identification system		11 500 000	1		11 500 000	
Transportation		1	20 000		20 000	
Sub-total Consumable resources					**11 748 750**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***12 428 706***	***201 500***
Total in	***NGN***				***1 864 305 833***	***30 225 000***

II-13. Identification and traceability
B. Identification and traceability of products of animal origin

1. Specific objective (Critical Competency)	
The authority and capability of the VS, normally in coordination with stakeholders, to identify and trace products of animal origin for the purpose of food safety, animal health or trade.	
2. Result (Expected level of advancement)	
1. The VS do not have the authority or the capability to identify or trace products of animal origin.	
2. The VS can identify and trace some products of animal origin to deal with a specific problem (e.g. products originating from farms affected by a disease outbreak).	
3. The VS have implemented procedures to identify and trace some products of animal origin for food safety, animal health or trade purposes, in accordance with relevant international standards.	
4. The VS have implemented national programmes enabling them the identification and tracing of all products of animal origin, in accordance with relevant international standards.	
5. The VS periodically audit the effectiveness of their identification and traceability procedures.	
3. Description of the activity	
Strategy of the activity	This CC has not been assessed during the PVS Evaluation and no priority actions have been defined during the PVS Gap Analysis. It could be possible to do a study on year 4 or 5 to assess the situation and understand the feasibility to trace some relevant animal products. The study must be focused on the sector on which the added value of traceability could be important for commercial or sanitary issues including animal health. The study has to be carried out in collaboration with NAFDAC and FDL.
Description of the task – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	Study on the feasibility to trace some relevant animal products.
Objectively verifiable indicators	Results of the study.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures (I.11)	
Information management (I.11)	

TRADE - 3 / CC: II.13. Identification and traceability
B. Identification and traceability of products of animal origin

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)		30,0	350			10 500
International expertise (weeks/5 years)		2,0	10 250			20 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure						**31 000**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					***31 000***
Total in	***NGN***					***4 650 000***

II-14. Animal welfare

1. Specific objective (Critical Competency)	
The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Code.	
2. Result (Expected level of advancement)	
1. The OIE standards are generally not implemented.	
2. Some of the OIE standards are implemented, e.g. primarily for the export sector.	
3. All of the OIE standards are implemented but this is primarily for the export sector.	
4. All of the OIE standards are implemented for the export and the domestic sector.	
5. The OIE standards are implemented and implementation is periodically subject to independent external evaluation.	
3. Description of the activity	
Strategy of the activity	This CC was not assessed during PVS Evaluation. The issue of animal welfare becomes relevant in Nigeria with the creation of some groups involved in this topic. Nigerian VS have appointed a focal point for OIE. During the next five years, the priority will be to introduce some relevant standards on animal welfare into the legislation which will be updated during this period (e.g. abattoirs, transportation…). This requires reliable information and consultation with stakeholders to determine appropriate standards.
Description of the task – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	

4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures	
Information management	

ANIMAL HEALTH - 5 / CC: II.14. Animal Welfare						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

III-1.Communication

1. Specific objective (Critical Competency)

The capability of the VS to keep stakeholders informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety.

2. Result (Expected level of advancement)

1. The VS have no mechanism in place to inform stakeholders of VS activities and programmes.
2. The VS have informal communication mechanisms.
3. The VS maintain an official contact point for communications but they are not always up-to-date in providing information.
4. The VS contact point for communications provides up-to-date information, accessible via the Internet and other appropriate channels, on activities and programmes.
5. The VS have a well developed communication plan, and actively and regularly circulate information to stakeholders.

3. Description of the activity

Strategy of the activity		The Nigerian VS have acquired experience thanks to AI projects. This should allow them to disseminate the communication strategy to other relevant topics.
Description of the tasks	**Year 1**	Update the communication strategy including the definition of the appropriate channels through which FDL and the DVS may communicate with key stakeholders, private veterinarians, public health services, other relevant partners and the general public Ensure a functioning internet site and intranet system at FDL level Production and diffusion of radio and/or TV spots Publication of newsletters, posters, handouts etc. Develop collaboration with mass media in order to produce and distribute radio and TV spots and other communication materials Training of field staff in order to increase communication capacities
	Year 2	Ensure a functioning internet site at FDL level Production and diffusion of radio and/or TV spots Publication of newsletters, posters, handouts etc. Development of functioning intranet system at federal and state levels
	Year 3	Review of the communication strategy Ensure a functioning internet site at FDL level Ensure a functioning intranet system at federal and state levels Production and diffusion of radio and/or TV spots Publication of newsletters, posters, handouts etc. Refresh training for field staff
	Year 4	Ensure a functioning internet site at FDL level Ensure a functioning intranet system at federal and state levels Production and diffusion of radio and/or TV spots Publication of newsletters, posters, handouts etc.
	Year 5	Ensure a functioning internet site at FDL level Ensure a functioning intranet system at federal and state levels Production and diffusion of radio and/or TV spots Publication of newsletters, posters, handouts etc. Refresh training for field staff.
Objectively verifiable indicators		Updated communication strategy; internet site; intranet system; newsletters, publications, radio and TV productions …

4- Possible link with cross-cutting competencies

Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	Consultation with key stakeholders
Official representation (III.3)	
Procedures	
Information management	Communication activities to be included in the database.

MANAGEMENT OF VETERINARY SERVICES - 12 / III-1. Communications

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)		15				
Existing building to be maintained (m2)		15	4	1	60	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Website		1	5 000	3	1 667	
Sub-total Material investments					**1 727**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree		1,0	10 000		10 000	
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries					**10 000**	
Consumable resources / year						
Administration			20%		2 000	
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
General communication		1	10 000		10 000	
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources					**12 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***23 727***	
Total in	***NGN***				***3 559 000***	

III-2.Consultation with stakeholders

1. Specific objective (Critical Competency)	
The capability of the VS to consult effectively with stakeholders on VS activities and programmes, and on developments in animal health and food safety.	
2. Result (Expected level of advancement)	
1. The VS have no mechanisms for consultation with stakeholders.	
2. The VS maintain informal channels of consultation with stakeholders.	
3. The VS maintain a formal consultation mechanism with stakeholders.	
4. The VS regularly hold workshops and meetings with stakeholders.	
5. The VS actively consult with and solicit feedback from stakeholders regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities.	
3. Description of the activity	
Strategy of the activity	In the context of Nigeria, the main difficulties include organising regular consultations at state level and the limited list of representative organisations of stakeholders, mainly on animal smallholders and informal activities. At federal level, there is a National Livestock Development Committee in charge of discussing the strategy of livestock issues. However lots of consultations have been recommended for technical activities and will facilitate reaching the target level 3. The objective to develop some mechanism/s for formal consultation with stakeholders at federal, state and local governmental levels. The MoA has a legal unit to prepare the legislation. A desk officer is in the FDL.
Description of the tasks – **Year 1**	Carry out an inventory of existing stakeholders' organisations at federal, state and LGA levels Develop procedures for formal consultation among key stakeholders including management of stakeholders' feedback Organise meetings at state level to validate the proposed procedures to consult stakeholders Implement the validated consultation procedures
Year 2	Implement the validated procedures to consult stakeholders Evaluation and update of the procedures
Year 3	Implement consultation procedures of
Year 4	Implement consultation procedures
Year 5	Implement consultation procedures
Objectively verifiable indicators	Consultation procedures; records of meetings/workshops.
4- Possible link with cross-cutting competencies	
Continuing Education	
Legislation (IV.1, 2, 3)	
Communication (III.1)	Communication (see III.1)
Consultation (III.2)	
Official representation	
Procedures	Consultation procedures
Information management	Consultation reports to be included in the database.

MANAGEMENT OF VETERINARY SERVICES - 13 / III-2. Consultation with stakeholders						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		40	1 500		60 000	
Kits / reagents / vaccines						
Support to extension services		1	60 000		60 000	
Sub-total Consumable resources					**120 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***120 000***	
Total in	***NGN***				***18 000 000***	

III-3.Official representation

1. Specific objective (Critical Competency)		
The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisations including the OIE (and Codex Alimentarius Commission and WTO SPS Committee where applicable).		
2. Result (Expected level of advancement)		
1. The VS do not participate in or follow up on relevant meetings of regional or international organisations.		
2. The VS participate sporadically in relevant meetings and/or make limited contribution.		
3. The VS participate actively[10] the majority of relevant meetings.		
4. The VS consult with stakeholders and take into consideration their opinions in providing papers and making interventions in relevant meetings.		
5. The VS consult with stakeholders to ensure that strategic issues are identified, to provide leadership and to ensure coordination among national delegations as part of their participation in relevant meetings.		
3. Description of the activity		
Strategy of the activity		Participation in the OIE activity is good with focal points for the main topics. Some consultations are organised through the National Livestock Development Committee. Information of these meetings are sent to DVSs. The participation in Codex Alimentarius activities must be improved. The FDL has been recently appointed as chair of the sub-committee on animal feeds and animal products of the national committee of Codex Alimentarius..
Description of the tasks	**Year 1**	Establish the list of relevant meetings which need to be attended and make the necessary budget provision Ensure the preparation and the evaluation of the participation/contribution of the VS to the relevant meetings. For this, it would be necessary to nominate some ad hoc committees Organise feedback meetings to communicate outcomes of meetings to key stakeholders Ensure distribution of the proceedings of the meetings and the back to office reports to relevant federal and state staff and to concerned stakeholders. Establish (or activate) consultations with the SLDC
	Year 2	Idem
	Year 3	Idem Evaluate the system in place in order to strengthen the gaps.
	Year 4	Idem
	Year 5	Idem.
Objectively verifiable indicators		Proceedings of these meetings, communication of the conclusion of stakeholders and staff.
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		Consultation with key stakeholders.
Official representation (III.3)		
Procedures		
Information management		Proceedings of meetings and back to office reports to be included in the database.

[10] Active participation refers to preparation in advance of, and contributing during the meetings in question, including exploring common solutions and generating proposals and compromises for possible adoption

MANAGEMENT OF VETERINARY SERVICES - 14 / III-3. Official representation						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year		3	3 600		10 800	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines		1	1 000		1 000	
Sub-total Consumable resources					**11 800**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***11 800***	
Total in	***NGN***				***1 770 000***	

III-4. Accreditation / authorisation / delegation

1. Specific objective (Critical Competency)	
The authority and capability of the public sector of the VS to accredit / authorise / delegate the private sector (e.g. private veterinarians and laboratories), to carry out official tasks on its behalf.	
2. Result (Expected level of advancement)	
1. The public sector of the VS has neither the authority nor the capability to accredit / authorise / delegate the private sector to carry out official tasks.	
2. The public sector of the VS has the authority and capability to accredit / authorise / delegate to the private sector, but there are no current accreditation / authorisation / delegation activities.	
3. The public sector of the VS develops accreditation / authorisation / delegation programmes for certain tasks, but these are not routinely reviewed.	
4. The public sector of the VS develops and implements accreditation / authorisation / delegation programmes, and these are routinely reviewed.	
5. The public sector of the VS carries out audits of its accreditation / authorisation / delegation programmes, in order to maintain the trust of their trading partners and stakeholders.	
3. Description of the activity	
Strategy of the activity	The FDL has already initiated a pilot programme to experiment the "Sanitary Mandate" in some states (Borno, Enugu, Kaduna….). There is a need to evaluate the strengths and weaknesses of this operation before the extending to other states. In the context of Nigeria, the VS should develop accreditation/authorisation/delegation programmes mainly for vaccination against priority diseases, active surveillance and meat inspection. Although the country has two or three private veterinary diagnostic laboratories, there is no plan in the five coming years to extend the accreditation/authorisation/delegation programme to the laboratory.
Description of the tasks – **Year 1**	Update the legislative and regulatory frameworks Update the procedures regarding delegated activities, selection of dossiers and supervision of field activities of private veterinariansDefine the minimum requirements for applications to "sanitary mandate" in collaboration with the VCN Organise consultation with states and key stakeholders. Ensure budgetary provisions for accreditation/authorisation/delegation activities.
Description of the tasks – **Year 2**	Organise the selection of private veterinarians for accreditation/authorisation/delegation activities Ensure budgetary provisions for accreditation/authorisation/delegation activities Monitor accreditation/authorisation/delegation activities.
Description of the tasks – **Year 3**	Organise the selection of private veterinarians for accreditation/authorisation/delegation activities Ensure budgetary provisions for accreditation/authorisation/delegation activities Monitor accreditation/authorisation/delegation activities Evaluation of the accreditation/authorisation/delegation programmes.
Description of the tasks – **Year 4-5**	Organise the selection of private veterinarians for accreditation/authorisation/delegation activities Ensure budgetary provisions for accreditation/authorisation/delegation activities Monitor accreditation/authorisation/delegation activities.
Objectively verifiable indicators	Updated legislation and regulation; procedures for applications to "sanitary mandate"; requirements for application to "sanitary mandate"; reports of private veterinarians; evaluation reports.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	Update legislation and regulation
Communication (III.1)	
Consultation (III.2)	Consultation with state (DVS) and key stakeholders
Official representation (III.3)	
Procedures	Procedures for applications to "sanitary mandate", selection of dossiers and supervision of the field activities of private veterinarians
Information management	Relevant information related to "sanitary mandate" to be included in the database of the FDL.

MANAGEMENT OF VETERINARY SERVICES - 15 / III-4. Accreditation / Authorisation / Delegation						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Specific delegated activities					9 500 000	
Other activities or global estimation						
Sub-total Delegated activities					**9 500 000**	
Total in	***USD***				***9 500 000***	
Total in	***NGN***				***1 425 000 000***	

III-5.Veterinary Statutory Body (VSB)
A. VSB authority

1. Specific objective (Critical Competency)	
The VSB is an autonomous authority responsible for the regulation of the veterinarians and veterinary para-professionals. Its role is defined in the Terrestrial Code.	
2. Result (Expected level of advancement)	
1. There is no legislation establishing a Veterinary Statutory Body.	
2. The VSB regulates veterinarians only within certain sectors of the veterinary profession and/or does not systematically apply disciplinary measures.	
3. The VSB regulates veterinarians in all relevant sectors of the veterinary profession and applies disciplinary measures.	
4. The VSB regulates functions and competencies of veterinarians in all relevant sectors and veterinary para-professionals according to needs	
5. The VSB regulates and applies disciplinary measures to veterinarians and veterinary para-professionals in all sectors throughout the country.	
3. Description of the activity	
Strategy of the activity	The objective is to allow the VCN to ensure effective regulation in the relevant sectors of the veterinary profession at federal, state and local levels including registration of veterinary para-professionals. Moreover, the VCN should be involved in the coordination of continuing education and assessment of the needs of qualified veterinarians.
Description of the tasks – **Year 1**	Update the legislative framework Review the procedures established for the management of the VCN Registry Ensure the publication of VCN activities including disciplinary measures Improve the visibility of VCN's activities through better communication in the country and abroad
Year 2	Ensure the publication of VCN activities including disciplinary measures Improve the visibility of VCN's activities
Year 3	Ensure the publication of VCN activities including disciplinary measures Improve the visibility of VCN's activities Audit the procedures of the VCN Registry
Year 4	Ensure the publication of VCN activities including disciplinary measures Improve the visibility of VCN's activities
Year 5	Ensure the publication of VCN activities including disciplinary measures Improve the visibility of VCN's activities.
Objectively verifiable indicators	Updated legislation; VCN reports

4- Possible link with cross-cutting competencies	
Continuing Education	
Legislation (IV.1, 2, 3)	Updating of the legislation
Communication (III.1)	
Consultation (III.2)	Consultation with FDL, DVS and other relevant institutions
Official representation	
Procedures	Procedures for the management of the VCN Registry
Information management	

MANAGEMENT OF VETERINARY SERVICES - 16 / III-5. Veterinary Statutory Body A. VSB authority						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

III-5.Veterinary Statutory Body (VSB)
B. VSB capacity

1. Specific objective (Critical Competency)
The capacity of the VSB to implement its functions and objectives in conformity with OIE standards..

2. Result (Expected level of advancement)	
1.	The VSB has no capacity to implement its functions and objectives.
2.	The VSB has the functional capacity to implement its main objectives.
3.	The VSB is an independent representative organisation with the functional capacity to implement all of its objectives
4.	The VSB has a transparent process of decision making and conforms to OIE standards.
5.	The financial and institutional management of the VSB is submitted to external auditing.

3. Description of the activity		
Strategy of the activity		
Description of the tasks	**Year 1**	Strengthen the staff of the VCN Registry in order to ensure effective regulation in the relevant sectors of the veterinary profession at federal, state and local levels (supervision of relevant activities at state level) (by recruiting 7 veterinarians) Reinforcement of the VCN Registry Definition of formal procedures of VCN activities and collaboration and consultation with the FDL, the DVS and other relevant institutions.
	Year 2	Recruitment of additional veterinary staff in order to appoint one VCN representative in each state Implement the procedures of VCN activities and collaboration and coordination with FDL, DVS and other relevant institutions Audit of the financial and institutional management of VCN.
	Year 3	Update VCN procedures (if needed) Implement the procedures of VCN activities and collaboration and coordination with FDL, DVS and other relevant institutions Audit of the financial and institutional management of VCN
	Year 4	Implement the procedures of VCN activities and collaboration and coordination with FDL, DVS and other relevant institutions Audit of the financial and institutional management of VCN
	Year 5	Implement the procedures of VCN activities and collaboration and coordination with FDL, DVS and relevant other institutions Audit of the financial and institutional management of VCN
Objectively verifiable indicators		List of staff, procedures, audit reports

4- Possible link with cross-cutting competencies	
Continuing Education	
Legislation (IV.1, 2, 3)	
Communication (III.1)	Improvement of communication with the general public
Consultation (III.2)	Consultation with FDL, DVS and other relevant stakeholders
Official representation	
Procedures	Procedures of VCN activities and collaboration and coordination with FDL, DVS and other relevant institutions
Information management	

MANAGEMENT OF VETERINARY SERVICES - 17 / III-5. Veterinary Statutory Body B. VSB capacity						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
External audit (man days)		5	300		1 500	
Subsidies for VCN		1	150 000		150 000	
Sub-total Consumable resources					**151 500**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***151 500***	
Total in	***NGN***				***22 725 000***	

III-6.Participation of producers and other stakeholders in joint programmes

1. Specific objective (Critical Competency)		
The capability of the VS and stakeholders to formulate and implement joint programmes in regard to animal health and food safety.		
2. Result (Expected level of advancement)		
1. Producers and other stakeholders only comply and do not actively participate in programmes.		
2. Producers and other stakeholders are informed of programmes and assist the VS to deliver the programmes in the field.		
3. Producers and other stakeholders are trained to participate in programmes and advise of needed improvements, and participate in early detection of diseases.		
4. Representatives of producers and other stakeholders negotiate with the VS on the organisation and delivery of programmes.		
5. Producers and other stakeholders are formally organised to participate in developing programmes in close collaboration with the VS.		
3. Description of the activity		
Strategy of the activity		The FDL has already developed strong collaboration with some stakeholders in the context of rinderpest eradication and more recently for the HPAI control although, these experiences were not exactly joint programmes. There are some opportunities to develop joint programmes in particular for the eradication of ASF and to improve hygiene in the dairy sector. The budget for this competency is included in the technical activities (II.7 and II.8B).
Description of the task	**Year 1**	Organise consultations with stakeholders List of susceptible joint programmes Development of the regulation framework for implementation and monitoring of joint programmes
	Year 2	Train stakeholders Implement joint programme (ASF)
	Year 3	Implement joint programmes (ASF, hygiene in the dairy sector) Monitor the joint programmes Assess the implementation of joint programmes
	Year 4	Implement joint programmes (ASF, hygiene in the dairy sector) Monitor the joint programmes
	Year 5	Implement joint programmes (ASF, hygiene in the dairy sector) Monitor the joint programmes Assess the implementation of joint programmes
Objectively verifiable indicators		Regulation framework; Joint programmes
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		Regulation framework for the implementation of joint programmes
Communication (III.1)		Communication about the joint programmes
Consultation (III.2)		Regular consultations between FDL, DVS and key stakeholders
Official representation (III.3)		
Procedures		
Information management		

MANAGEMENT OF VETERINARY SERVICES - 18 / III-6. Participation of producers and other stakeholders in joint programmes						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

IV-1. Preparation of legislation and regulations, and implementation of regulations

1. Specific objective (Critical Competency)		
The authority and capability of the VS to actively participate in the preparation of national legislation and regulations, and to implement animal health and food safety regulations for animals, animal products and processes under their mandate.		
2. Result (Expected level of advancement)		
1. The VS have neither the authority nor the capability to participate in the preparation of national legislation and regulations, and implement the resulting regulations.		
2. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, but cannot implement the resulting regulations nationally.		
3. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, and to implement the resulting regulations nationally.		
4. The VS consult their stakeholders in participating in the preparation of national legislation and regulations, and in implementing regulations to meet national needs.		
5. The VS consult their stakeholders in implementing regulations to meet international trade needs.		
3. Description of the activity		
Strategy of the activity		Preparation of legislation should include: Veterinary activities and animal health, abattoirs, veterinary medicines and biologicals, laboratories, identification of animals. This legislation should be designed in consultation with stakeholders. There is a unit at the MoA in charge of supporting the department to prepare the legislation and a veterinary officer in the FDL. This veterinary officer has to collect and maintain updated legislation or regulation for each states.
Description of the tasks	**Year 1**	Host an OIE Veterinary Legislation Identification mission
	Year 2	Formalise procedure for consultation during the preparation of new legislation.
	Year 3	
	Year 4	
	Year 5	Audit on the legislation framework to measure the level of implementation of international standards.
Objectively verifiable indicators		New legislation, results of the OIE Veterinary Legislation mission.
4- Possible link with cross-cutting competencies		
Continuing Education		Training programmes on legislation
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		Consultation with stakeholders
Official representation (III.3)		
Procedures		Procedures for consultation with stakeholders.
Information management		

MANAGEMENT OF VETERINARY SERVICES - 19 / CC: IV.1. Preparation of legislation and regulations						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)		30				
Existing building to be maintained (m2)		30	4	1	120	
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set		1	1 200	5	240	
Office equipment set		1	2 000	3	667	
Other specific equipment						
Sub-total Material investments					**1 027**	
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		111,0	144		16 033	
National expertise (days/5 years)			350			
International expertise (weeks/5 years)		4,0	10 250			41 000
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**16 033**	**41 000**
Salaries / year						
Veterinarians			15 000			
Other university degree		2,0	10 000		20 000	
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries					**20 000**	
Consumable resources / year						
Administration			20%		4 000	
Travel allowances						
staff within the country (man-days) / year		70	80		5 600	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		3	2 000		6 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**15 600**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***52 660***	***41 000***
Total in	***NGN***				***7 899 000***	***6 150 000***

IV-2. Stakeholder compliance with legislation and regulations

1. Specific objective (Critical Competency)		
The authority and capability of the VS to ensure that stakeholders are in compliance with animal health and food safety regulations under the VS mandate.		
2. Result (Expected level of advancement)		
1.	The VS have no programme to ensure stakeholder compliance with relevant regulations.	
2.	The VS implement a programme consisting of inspection and verification of compliance with regulations relating to animals and animal products, report instances of non-compliance, but generally do not take further action.	
3.	If necessary, the VS impose appropriate penalties in instances of non-compliance.	
4.	The VS work with stakeholders to minimise instances of non-compliance.	
5.	The VS carry out audits of their compliance programme.	
3. Description of the activity		
Strategy of the activity		The inspection methods should be defined for each domain with relevant training of inspectors. Taking into account the fact that inspection methods have to be defined or improved for a large part of VS topics (as in the technical CC). This will involve a significant amount of work. Moreover, appropriate prosecution and penalties must be enforced when stakeholders are not in compliance with the legislation. This means a change of culture in order to enforce these laws in all sectors (not only in the veterinary sector). There is no planning to define SOPs of the inspection. This will be done through technical activities (II.5 to II.10).
Description of the tasks	**Year 1**	
	Year 2	
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		
Official representation (III.3)		
Procedures		
Information management		

MANAGEMENT OF VETERINARY SERVICES-20/CC: IV-2. Implementation of legislation and regulations and stakeholder compliance						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

IV-3. International harmonisation

1. Specific objective (Critical Competency)		
The authority and capability of the VS to be active in the international harmonisation of regulations and sanitary measures and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate.		
2. Result (Expected level of advancement)		
1.	National legislation, regulations and sanitary measures under the mandate of the VS do not take account of international standards.	
2.	The VS are aware of gaps, inconsistencies or non-conformities in national legislation, regulations and sanitary measures as compared to international standards, but do not have the capability or authority to rectify the problems.	
3.	The VS monitor the establishment of new and revised international standards, and periodically review national legislation, regulations and sanitary measures with the aim of harmonising them, as appropriate, with international standards, but do not actively comment on the draft standards of relevant intergovernmental organisations.	
4.	The VS are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations.	
5.	The VS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards, and use the standards to harmonise national legislation, regulations and sanitary measures.	
3. Description of the activity		
Strategy of the activity		The improvement of other critical competencies (CC) in particular CC IV.1 and the implementation of the updated veterinary legislation will allow the FDL to actively and regularly participate in the formulation, negotiation and adoption of international standards. Participation also in regional and continental meetings will also be necessary No specific budget required.
Description of the tasks	**Year 1**	Improvement of FDL's participation in the relevant meetings of OIE, Codex Alimentarius etc Documentation of relevant standards
	Year 2	
	Year 3	
	Year 4	
	Year 5	
Objectively verifiable indicators		
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		
Legislation (IV.1, 2, 3)		
Communication (III.1)		
Consultation (III.2)		
Official representation (III.3)		
Procedures		
Information management		

MANAGEMENT OF VETERINARY SERVICES - 21 / IV-3. International harmonisation						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

IV-4. International certification

1. Specific objective (Critical Competency)		
The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations, and international standards.		
2. Result (Expected level of advancement)		
1. The VS have neither the authority nor the capability to certify animals, animal products, services or processes.		
2. The VS have the authority to certify certain animals, animal products, services and processes, but are not always in compliance with the national legislation and regulations and international standards.		
3. The VS develop and carry out certification programmes for certain animals, animal products, services and processes under their mandate in compliance with international standards.		
4. The VS develop and carry out all relevant certification programmes for any animals, animal products, services and processes under their mandate in compliance with international standards.		
5. The VS carry out audits of their certification programmes, in order to maintain national and international confidence in their system.		
3. Description of the activity		
Strategy of the activity		The Nigerian VS are probably already at level 4. The main objectives will be to consolidate this level. An important audit of all certification procedure of all live animals and animal products which are intended for exportation will have to be carried out. Based on its main findings, a database for electronic certification should be designed.
Description of the task	**Year 1**	Audit the certification procedures and organise a workshop to present the recommendations.
	Year 2	Upgrading of the SOPs and the definitions of certification programmes. Training of staff. Development of the database
	Year 3	
	Year 4	Audit certification programmes.
	Year 5	
Objectively verifiable indicators		Results of the audit, SOPs complying with OIE standards, training of staff.
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		Training of operational staff
Legislation (IV.1, 2, 3)		Audit relevant legislation and update it.
Communication (III.1)		
Consultation (III.2)		Consultation with exporting companies.
Official representation (III.3)		
Procedures (I.11)		
Information management (I.11)		

TRADE - 4 / CC: IV.4. International certification

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		80,0	144		11 556	
National expertise (days/5 years)		10,0	350			3 500
International expertise (weeks/5 years)		1,0	10 250			10 250
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**11 556**	**13 750**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		20	80		1 600	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication		1	1 000		1 000	
Consultation (number of 1 day meetings)		1	1 000		1 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**3 600**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***15 156***	***13 750***
Total in	***NGN***				***2 273 333***	***2 062 500***

IV-5. Equivalence and other types of sanitary agreements

1. Specific objective (Critical Competency)	
The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.	
2. Result (Expected level of advancement)	
1. The VS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries.	
2. The VS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented.	
3. The VS have implemented equivalence and other types of sanitary agreements with trading partners on selected animals, animal products and processes.	
4. The VS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to animals, animal products and processes under their mandate.	
5. The VS actively work with stakeholders and take account of developments in international standards, in pursuing equivalence and other types of sanitary agreements with trading partners.	
3. Description of the activity	
Strategy of the activity	Nigeria could export some animals and animal products: poultry and pigs to Benin or Cameroun. Therefore, the consultations for trade agreement should focus their priorities on these countries. 1- Furthermore, consultation with neighbouring countries to export live animals must aim to ensure safer animal movements and reduce illegal trade (II.4; II.13…). Close cooperation with border posts between the countries should be developed. Collaboration between FDL and NAQS with the CVO of other countries must be emphasized.
Description of the task – **Year 1**	Consultations with neighbouring countries and with ECOWAS.
Year 2	Consultations with neighbouring countries.
Year 3	Consultations with neighbouring countries.
Year 4	Consultations with neighbouring countries.
Year 5	Consultations with neighbouring countries.
Objectively verifiable indicators	Number of signed MoUs or agreements updated regularly.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	Consultations with other countries. Information of the relevant stakeholders.
Official representation (III.3)	
Procedures (I.11)	
Information management (I.11)	Database on trade partners affected by the different agreements.

TRADE-5 /CC: IV.5. Equivalence and other types of sanitary agreements

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year		5	3 600		18 000	
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		3	1 500		4 500	
Kits / reagents / vaccines						
Sub-total Consumable resources					**22 500**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***22 500***	
Total in	***NGN***				***3 375 000***	

IV-6. Transparency

1. Specific objective (Critical Competency)	
The authority and capability of the VS to notify the OIE of their sanitary status and other relevant matters (and to notify the WTO SPS Committee where applicable), in accordance with established procedures.	
2. Result (Expected level of advancement)	
1. The VS do not notify.	
2. The VS occasionally notify.	
3. The VS notify in compliance with the procedures established by these organisations.	
4. The VS regularly inform stakeholders of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, and of changes in the regulations and sanitary status of other countries.	
5. The VS, in cooperation with their stakeholders, carry out audits of their transparency procedures.	
3. Description of the activity	
Strategy of the activity	The conditions for good transparency are: - An efficient epidemiological surveillance capable of identifying any notifiable or relevant contagious diseases; - An efficient and transparent process of notification from field level to the CVO, and from CVO to OIE. This means an operational chain of command. Taking into account the situation described by the Nigerian VS (level 4 or maybe level 5), it is important to do an audit to verify the efficiency and the effectiveness of the procedures for transparency. This audit could be combined with the audit on certification programmes. The country could organise a simulation exercise before the audit.
Description of the task	Simulation exercise performed by the country.
	External independent audit on the procedures. Evaluation of the conclusion, updating the procedures. Information of the staff involved in the chain of information, and the stakeholders.
	Simulation exercise performed by the country.
	External independent audit on the procedures.
	Simulation exercise performed by the country.
Objectively verifiable indicators	Results of the simulation exercises, results of the audit.
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	Training on updated procedures and OIE standards.
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	With stakeholders.
Official representation (III.3)	
Procedures (I.11)	Procedures for notification.
Information management (I.11)	Database of the VS with data on animal events.

TRADE - 6 / CC: IV.6. Transparency						
Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	**Annual Budget**	**Exceptional Budget**
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)		15,0	350			5 250
International expertise (weeks/5 years)		2,0	10 250			20 500
Special funds (/ 5 years) for …						
Sub-total non material expenditure						**25 750**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		1	1 000		1 000	
Kits / reagents / vaccines						
Sub-total Consumable resources					**1 000**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***1 000***	***25 750***
Total in	***NGN***				***150 000***	***3 862 500***

IV-7. Zoning

1. Specific objective (Critical Competency)	
The authority and capability of the VS to establish and maintain disease free zones, as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).	
2. Result (Expected level of advancement)	
1. The VS cannot establish disease free zones.	
2. As necessary, the VS can identify animal sub-populations with distinct health status suitable for zoning.	
3. The VS have implemented biosecurity measures that enable them to establish and maintain disease free zones for selected animals and animal products, as necessary.	
4. The VS collaborate with their stakeholders to define responsibilities and execute actions that enable them to establish and maintain disease free zones for selected animals and animal products, as necessary.	
5. The VS can demonstrate the scientific basis for any disease free zones and can gain recognition by trading partners that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).	
3. Description of the activity	
Strategy of the activity	Zoning requires the development of animal identification and animal movement traceability. Taking into account the situation in Nigeria, zoning is not in the short-term a priority. However, a type of zoning system could be tested in the strategy against ASF in pilot area. This strategy requires identifying the subpopulation free of ASF in the relevant area. The specific activities are developed in II.7.
Description of the task – **Year 1**	
Year 2	
Year 3	
Year 4	
Year 5	
Objectively verifiable indicators	
4- Possible link with cross-cutting competencies	
Continuing Education (I.3)	
Legislation (IV.1, 2, 3)	
Communication (III.1)	
Consultation (III.2)	
Official representation (III.3)	
Procedures (I.11)	
Information management (I.11)	

TRADE - 7 / CC: IV.7. Zoning

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)			144			
National expertise (days/5 years)			350			
International expertise (weeks/5 years)			10 250			
Special funds (/ 5 years) for …						
Sub-total non material expenditure						
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year			80			
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)						
Kits / reagents / vaccines						
Sub-total Consumable resources						
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***					
Total in	***NGN***					

IV-8. Compartmentalisation

1. Specific objective (Critical Competency)		
The authority and capability of the VS to establish and maintain disease free compartments as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).		
2. Result (Expected level of advancement)		
1. The VS cannot establish disease free compartments.		
2. As necessary, the VS can identify animal sub-populations with a distinct health status suitable for compartmentalisation.		
3. The VS have implemented biosecurity measures that enable them to establish and maintain disease free compartments for selected animals and animal products, as necessary.		
4. The VS collaborate with their stakeholders to define responsibilities and execute actions that enable it to establish and maintain disease free compartments for selected animals and animal products, as necessary.		
5. The VS can demonstrate the scientific basis for any disease free compartments and can gain recognition by other countries that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).		
3. Description of the activity		
Strategy of the activity		Nigeria may have the opportunity to export poultry and pork to neighbouring countries (Benin, Togo…). The creation of a compartment with poultry or pig intensive farms, or fish farms could facilitate exports.
Description of the task	**Year 1**	Identification of concerned stakeholders and their interest. Cost-benefit analysis of compartmentalisation for each production system and specie with the concerned stakeholders in order to verify if the cost of compartmentalisation is compatible with the expected market. Consultation with stakeholders on the results of the study to verify their commitment to such a strategy.
	Year 2	If the relevance of the strategy of compartmentalisation is confirmed, define procedures for identification and traceability; strengthening biosecurity measures, certification of products. Training of stakeholders and operational staff. Implementation of procedures by stakeholders.
	Year 3	Follow-up
	Year 4	Follow-up Evaluation of the compartmentalisation strategy.
	Year 5	Follow-up
Objectively verifiable indicators		Cost-benefit study, development of the compartment, exportation from the compartments.
4- Possible link with cross-cutting competencies		
Continuing Education (I.3)		Training of stakeholders and operational staff.
Legislation (IV.1, 2, 3)		Updating legislation if needed.
Communication (III.1)		
Consultation (III.2)		Consultation with stakeholders.
Official representation (III.3)		
Procedures (I.11)		Procedures of biosecurity measures, identification and traceability…
Information management (I.11)		

TRADE - 8 / CC: IV.8. Compartmentalisation

Resources and Budget lines	Current Number	Required Number	Unit Cost	Nb of years for amortisation	Annual Budget	Exceptional Budget
Material investments						
Buildings (m2)						
Existing building to be maintained (m2)			4	1		
Existing building to be renovated (m2)			40	10		
Building to be build (m2)			90	25		
Transport						
Number of motorbikes			400	3		
Number of cars			23 333	5		
Number of 4x4 vehicles			40 000	5		
boats						
Telecommunication equipment set			1 200	5		
Office equipment set			2 000	3		
Other specific equipment						
Sub-total Material investments						
Non material expenditure						
Training						
Specialised training (man-months / 5 year)			5 000			
Continuing education (man-days / year)		35,0	144		5 056	
National expertise (days/5 years)		25,0	350			8 750
International expertise (weeks/5 years)		3,0	10 250			30 750
Special funds (/ 5 years) for …						
Sub-total non material expenditure					**5 056**	**39 500**
Salaries / year						
Veterinarians			15 000			
Other university degree			10 000			
Veterinary para-professionals			6 000			
Support staff			3 000			
Sub-total Salaries						
Consumable resources / year						
Administration			20%			
Travel allowances						
staff within the country (man-days) / year		5	80		400	
drivers within the country (man-days) / year			67			
staff abroad (man-weeks) / year			3 600			
Transport fees						
Km or miles Motorbikes / year			0,04			
Km or miles cars / year			0,07			
Km or miles 4x4 vehicle / year			0,13			
km or miles boats / year			0,05			
km or miles / year						
Specific costs						
Targeted specific communication						
Consultation (number of 1 day meetings)		2	1 500		3 000	
Kits / reagents / vaccines						
Identification, traceability, certificates, leaflets		1	10 000		10 000	
Sub-total Consumable resources					**13 400**	
Delegated activities / year						
Sub-total Delegated activities						
Total in	***USD***				***18 456***	***39 500***
Total in	***NGN***				***2 768 333***	***5 925 000***