



SADC SECRETARIAT
FUND



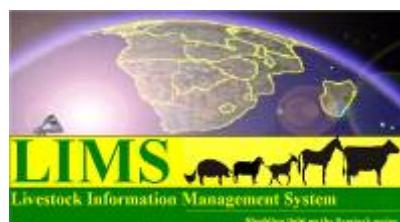
EUROPEAN DEVELOPMENT
FUND

**Promotion of Regional Integration in the SADC Livestock Sector
(PRINT Livestock Project)**

9 ACP SAD 002



Report of a Mission to the Republic of Angola



LIMS adoption mission (Stakeholder meeting, Training on application and Standards Operating Procedures)

PRINT Report N°: PB-BB-LIMS-AO-12-2008

Dr. Pascal BONNET, Chief Technical Adviser, PRINT

Dr Berhanu Bedane Information specialist, PRINT

SADC Secretariat
FANR Directorate,
Millenium Office Park
Kgale View
P/Bag 0095
Gaborone Botswana

Dates: 3rd Dezembro– 11rd Dezembro 2008

Acknowledgments / Agradecimentos

Agradecemos todos aqueles que são ligados directamente ou indirectamente à sector da pecuária e nos esclarecem durante a missão, especialmente os membros do “rede” temático LIMS de Angola, uma equipa de 11 pessoas que foram formado pelo team PRINT na periodo da missão. Muito obrigado pelas sugestões que vocês propuseram durante o curso.

We would like to thank all the colleagues who contributed to the success of this mission in one way or another, particularly Dr. Bernadette Santana Print Focal Person (PFP). We also pay tribute to Dr. Filipe Vissesse director Veterinary services (DNSV), Dr JoãoChamba, Dr Felizardo Pedro Raul for the warm welcome accorded to us and their patience for the intense organisation process and fruitful discussions in Luanda. Finally we would like to thank the members of the LIMS team in Angola. Their commitment is highly appreciated and their comments given during the course were extremely useful.



Index

Summary.....	4
1. OBJECTIVES OF THE MISSION.....	6
2. INSTITUTION VISITED AND PERSONS	6
3. ACTIVITIES.....	7
3-1. Stakeholder's workshop.....	7
Outlines	7
First participatory “stakeholder mapping” on the go as it was carried out at the end of the seminar	11
Listing of the participants to the LIMS seminar in Angola	13
Comments made during the LIMS seminar	19
Press releases	19
Background on AIMS and LIMS integration:.....	21
AGENDA of the LIMS SEMINAR	24
3-2. Training on LIMS.....	26
List of the 11 participants to the LIMS training.....	26
Agenda of the LIMS training in Angola	30
Validation of Partitions	39
Components, Modules and Templates looked at during the training.....	54
Related Manuals on templates and the LIMS application.....	98
Bugs and correction requested based on LIMS training in Angola	99
Fast presentation on the AIMS portal	99
3-3. Drafting of first SoP's for LIMS for Angola	99
4. Other Topics (than LIMS) discussed during the mission.....	108
TAD's project and use of LIMS and hand held devices in Angola (DPT).....	108
5. CONCLUSIONS & Way forwards	109
Annexures / Annexes.....	111
ANNEX I – Terms of reference for the mission.....	111
ANNEX II – CD (electronic annexes):	113
ANNEX III – Presentation made at the Launching seminar.....	116
ANNEX IV – Proposed SoP and comment sheet (excerpt to be improved by MS)...	117
ANNEX V – Admin. Partitions as implemented into LIMS for Angola before the training (without edition): in green ADMIN2, in yellow the ADMIN1	151
ANNEX VI – Administrative partitions as implemented in official databases (in compliance with other information systems) (to be compared to the list currently implemented into LIMS).....	155
ANNEX VII – Web-mapping manual on http://lims.sadc.int.....	159
ANNEX VIII – Some preamble before embarking on LIMS training	164
ANNEX IX – List of Modules into LIMS	166

BACK TO OFFICE MISSION REPORT

Summary

Country : Angola, Luanda
Mission team : Dr Pascal Bonnet CTA PRINT, Dr B. Bedane Information specialist PRINT
Dates : 3rd Dezembro– 11rd Dezembro 2008
Venue : Complexo Turistico de Bela Futungo & MINAGRI Ministry of Agriculture

Introduction: mission rationale and objective

The Livestock Sector Unit (LSU) in the Food, Agriculture and Natural Resources (FANR) Directorate of the SADC Secretariat is entrusted to promote regional integration and sustainable livestock development. The PRINT Livestock Project in FANR became operational in July 2005. The project's specific objective is to establish a livestock information management system (LIMS) in Animal Production and Health, Marketing and Trade. The generation of up-to-date and reliable information will assist the coordinating role of FANR as well as the development of harmonized policies and strategies in the SADC livestock sector. Besides this core objective and in order to prepare the running of such a system in SADC, a comprehensive Regional Training Program and several other events (workshops) are being organized with a strong support given to networks of professionals alike in the four sub committees of the SADC LTC.

The mission team comprised two SADC staff, namely, Dr. Pascal Bonnet (Animal Health & Livestock Economist, CTA Chief Technical Adviser PRINT – (Health & Livestock Economist, CIRAD¹), Dr Bedane Information specialist PRINT.

Summary of SADC PRINT mission:

The mission was the launching of the SADC LIMS system and comprised three components:

- the organisation of a AIMS-LIMS Stakeholders workshop, with the potential contributors to LIMS and the potential users of the system
- a 3 days Training of trainers on the LIMS system: application and principles,
- the drafting of the first elements for establishing Standards Operating Procedures of LIMS modules in Angola, and the support to the creation of a LIMS national network in order to prepare the rolling up of national trainings in 2009.

Detailed ToR's and timetable of the mission are provided in full in the annexures.

Funding of mission:

PRINT DL, corresponding budget line in Program Estimate PE4 / Addendum number 1 by DEC.

¹ CIRAD is contracted by SADC to provide the technical assistance to PRINT. It stands as acronym for the Agricultural Research Centre for International Development whose mandate is to contribute to poverty alleviation, food security, integrated management of natural resources and sustainable development in developing countries. CIRAD is promoting innovative research for development, in partnership with concerned stakeholders: research centres and universities, professional (farmer) organizations and the private sector, local authorities and NGOs, and funding agencies. Training and capacity building are a major part of CIRAD collaborative activities conducted through extended networks and projects in more than 50 countries in Africa, Asia and Latin America. CIRAD is also an active partner of the international system and of the European scientific platform. It has a staff of 1850 of which 750 researchers including 320 working overseas, and is structured in 7 scientific departments and 60 research and service units (see: <http://www.cirad.fr/en>)

Esta relatorio representa apenas o ponto de vista do seu autor e não poderá em quaisquer circunstâncias ser considerada como uma posição oficial da SADC e da Comissão Europeia ou como um qualquer compromisso formal da suas parte. Esta relatorio e eventuais ficheiros anexos apenas são pensados para o(a) destinatário(a) e podem conter informação privilegiada e/ou confidencial.

Si voces devia usar este relatorio, por favor deve usar la citaçao correita:

Report of a Mission to the **Republic of Angola, LIMS adoption mission** (AIMS-LIMS Stakeholders workshop, Training of national trainers, Standards Operating Procedures) PRINT Report N°: PB-BB-LIMS-AO-12-2008, By Dr. Pascal BONNET, Chief Technical Adviser, PRINT, Dr. Berhanu Bedane, Information Management TA, PRINT, 3rd Dezembro– 11rd Dezembro 2008.

Ce rapport exprime uniquement le point de vue de son auteur et ne saurait en aucun cas être considéré comme une position officielle de la SADC ou de la Commission européenne ou comme un engagement formel de leur part. Ce rapport et les fichiers et annexes qui y sont joints sont destinés uniquement à la personne à laquelle ils sont adressés et peuvent contenir des informations privilégiées et confidentielles.

Si vous utilisez ce rapport à des fins de référence bibliographique merci d'utiliser la citation suivante :

Report of a Mission to the **Republic of Angola, LIMS adoption mission** (AIMS-LIMS Stakeholders workshop, Training of national trainers, Standards Operating Procedures) PRINT Report N°: PB-BB-LIMS-AO-12-2008, By Dr. Pascal BONNET, Chief Technical Adviser, PRINT, Dr. Berhanu Bedane, Information Management TA, PRINT, 3rd Dezembro– 11rd Dezembro 2008.

This report represents solely the views of its author and cannot in any circumstances be regarded as an official position of the SADC or the European Commission or as a formal commitment from the EC. This report and the possible attached files and annexes are intended solely for their addressee and may contain information that is privileged and/or confidential.

If you use this report as a citation into any document please use the following citation:

Report of a Mission to the **Republic of Angola, LIMS adoption mission** (AIMS-LIMS Stakeholders workshop, Training of national trainers, Standards Operating Procedures) PRINT Report N°: PB-BB-LIMS-AO-12-2008, By Dr. Pascal BONNET, Chief Technical Adviser, PRINT, Dr. Berhanu Bedane, Information Management TA, PRINT, 3rd Dezembro– 11rd Dezembro 2008.

1. OBJECTIVES OF THE MISSION

The overall objective of the mission was to launch the LIMS system. This mission was also a follow up of the comprehensive situation analysis and information needs assessment started by PRINT in SADC member states in 2006 (Angola was covered in November 2006 after an EIS subcommittee meeting).

The **LIMS system** is made so far of 1/ the **LIMS software** and **harmonized reporting templates** (in Excel) which some selected staff were sensitized and trained on, 2/ **procedures** for information **exchange (SoP)** and for using the **LIMS system (a toolkit)** applied through 3/ a **network of stakeholders** (forming the national **LIMS network**) working in collaboration and elaborating its rules of functioning, 4/ a set of technical **reference documents** and **training material** (i.e. LIMS manuals, Training handouts etc..), 5/ an **AIMS LIMS portal** (web site to be developed)

The **national LIMS network**" means the various national institutions being sources of livestock data / information in the respective member states of SADC. They are all sharing the effort to collect and compile data into LIMS at national level thanks to the division of work agreed upon. Some institutions will also soon work at regional/provincial level thanks to the possible decentralization of the LIMS system. The national coordination unit will then be transferring the information to SADC secretariat at a regional level using the procedures agreed upon.

Therefore a selection of professionals was trained on the harmonized templates, the software and on the procedures. Secondly one purpose of the mission was to evaluate again, thanks to a participatory approach, the **national data sources** in the areas of **Animal Health, Animal Production and Livestock Trade and Marketing**, in order to start drafting the SoP's for running smoothly and gradually the LIMS system.

This report complements the following report regarding the first formal situation analysis made in the country in 2006 and therefore the later should be considered and consulted as an annex to the current one.

*Report on the situation analysis in Angola : Report of a Mission to the Republic of Angola,
LIMS situation analysis, PRINT Report N°: PB-BB-GW-LIMS-AO-11-2006, By Dr. Pascal
BONNET, Chief Technical Adviser, PRINT, Dr. Berhanu Bedane, Information Management TA,
Dr Gift Wanda Epidemiologist PRINT, November 2006.*

Remarks on the languages used in the report.

For facilitating the reading of the report by the angolese authorities, this LIMS report is written in three languages: mainly in *english*, with also some *french* and *portuguese* (in some figures and captions, or in excerpts taken from some external sources of information used to describe LIMS contents). The angolese gov. staff is used to Portuguese and French.

2. INSTITUTION VISITED AND PERSONS

The summarized and some detailed contact addresses of persons met during the mission are provided in the following and respective chapters.

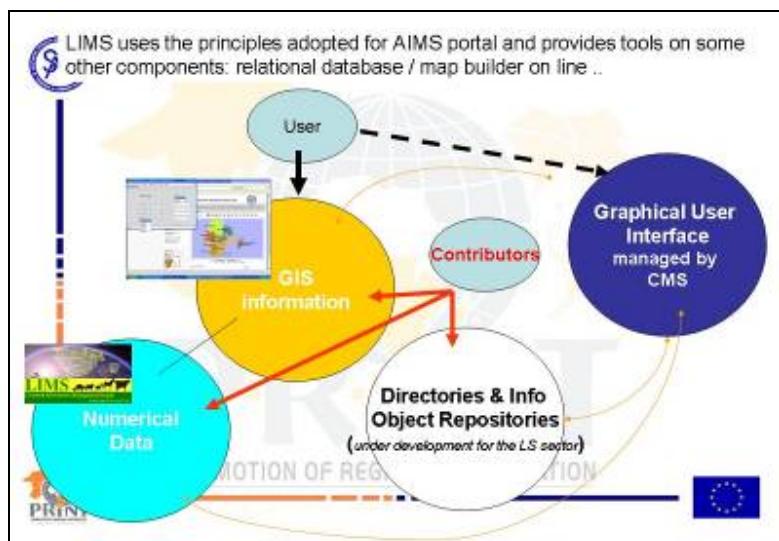
3. ACTIVITIES

3-1. Stakeholder's workshop

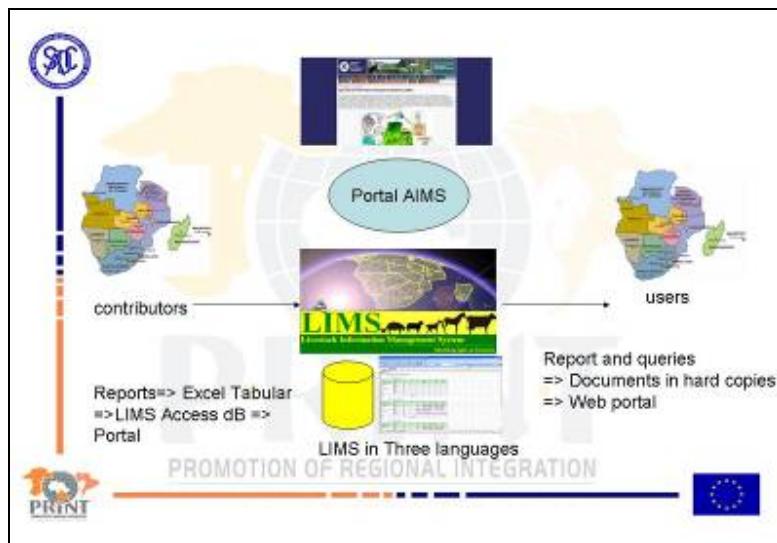
The objective of such stakeholder's workshop was to present the entire AIMS initiative in order for participants to "locate" the LIMS system as a component (sub system) under the AIMS system. It is therefore a follow up of former meetings dedicated to regional agriculture information systems, but this time focussing on the Livestock sector.

Outlines

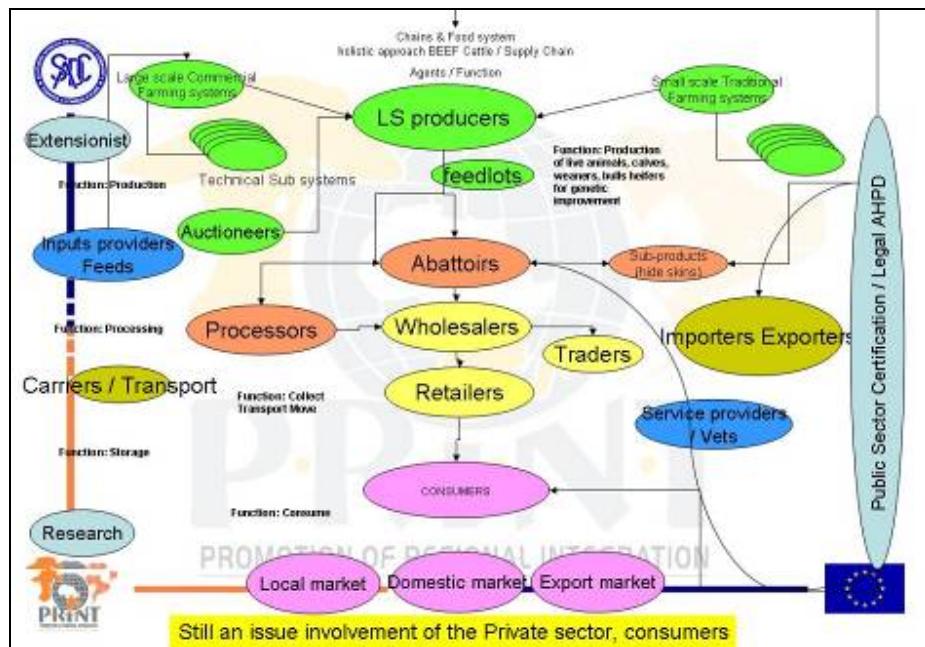
The entire set of presentations made by PRINT is provided in the annex and was left to participants in a CD. The following slides only summarize the outlines.



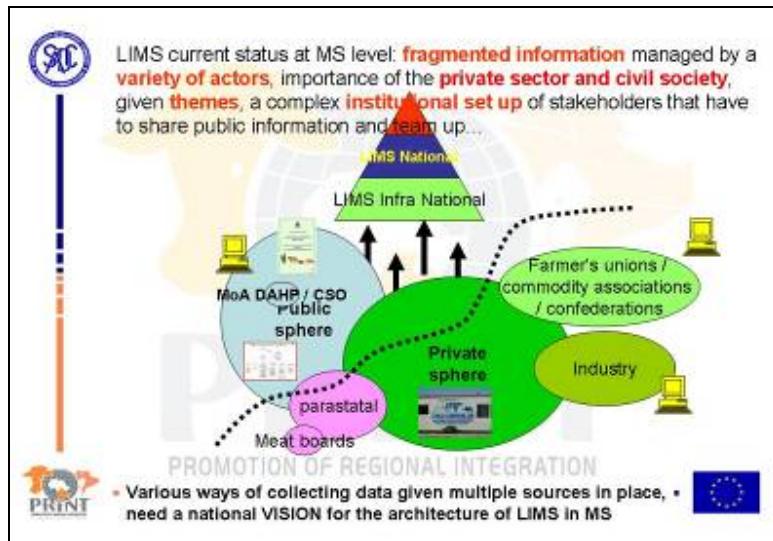
The expected components of AIMS and the place of LIMS elements were presented (i.e. the Excel Templates, database in MS Access application to facilitate data compilation and exchange, and LIMS web-based portal (mapping) to display indicators computed from the database or communicate with the other members of the AIMS community).



LIMS is a system not *only* a database: it has **contributors** (from the LIMS national network) and **users** (any one using the portal), and it has a toolkit made of Excel Templates, database in a MS Access application and **procedures** for data compilation and exchange.



The sector is represented as a series of **commodity chains** & maps: all stakeholders from the system should participate to the national livestock community (forum)

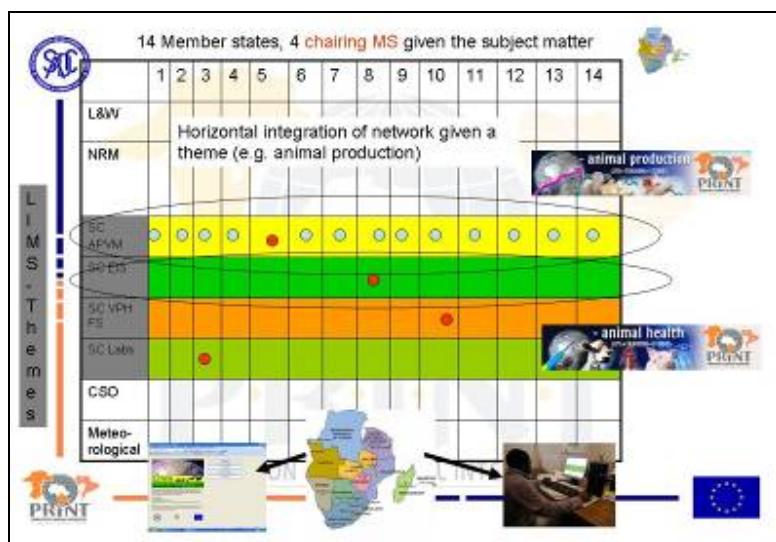


Contributors to LIMS will originate from **multiple institutions** and will represent **various sources**, therefore will have to work in collaboration thanks to the formation of the national LIMS network. Therefore, LIMS provides for capturing data from various stakeholders and institutions, given their expertise and interest in the system, at various scales and can therefore be decentralized. It is therefore a **modular** system.

Nevertheless a **central coordination and management unit** is required (coordinated by the network) as there will be a national LIMS database centralized in the country.

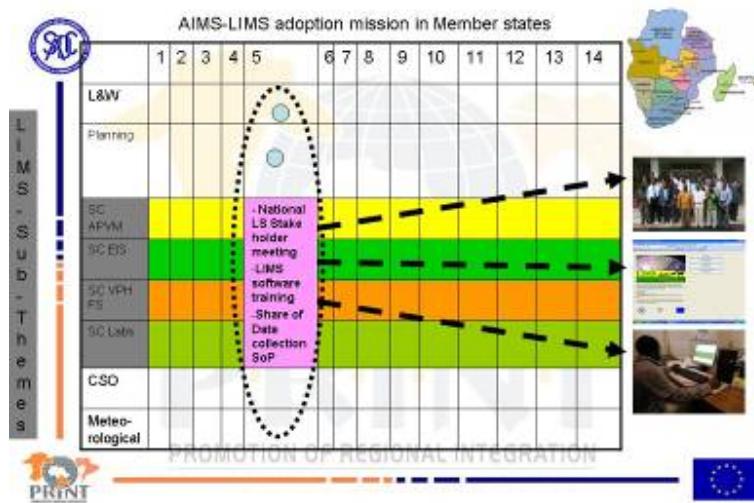
Networking of institutions

PRINT has already worked out the networking aspect of the information system (IS) by supporting the **horizontal integration** of actors, thanks to the support of the 4 subject matter **SADC sub committees of LTC**, composing four task forces aiming at managing part of the LIMS and therefore being its **custodian at regional level**. “Horizontal integration” means the integration of networks of stakeholders on a subject matter or specific areas of interest for the LS sector



Four subcommittees of LTC horizontally integrated

The AIMS initiative and the LIMS launching missions are opportunities to complement the process initiated in 2007 by boosting the **vertical integration** of national networks “at the periphery” of the core Livestock sector, here represented by the four representatives to the sub committees of SADC, this topic being central at this occasion. “Vertical integration” means an aggregation and integration of new players, i.e. new professionals to the core group and network of pure Livestock specialists (e.g. by adding specialist of meteorology, of early warning systems).



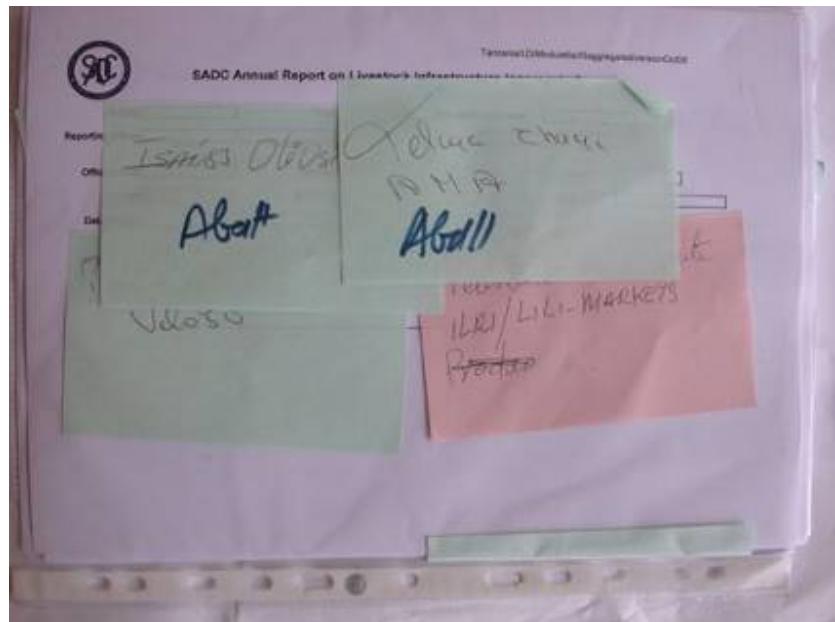
Enhancing vertical integration in the agricultural sector in Angola



The participants to the LIMS launching seminar gathering at the venue: “Complexo Turistico de Bela Futungo”. The workshop was held in Spanish and Portuguese and around 35 stakeholders attended.

First participatory “stakeholder mapping” on the go as it was carried out at the end of the seminar

Participants to the seminar were asked to indicate their preferences (theme of interest) in participating to the LIMS by sticking their name and name of their institution on the various LIMS templates displayed around the table in the seminar venue. It allowed PRINT to identify the various interests and possible contributions to the system, to a point where some appointments were made for the third activity of the adoption mission, i.e. the establishment of a national LIMS network and the drafting of first SoP's. Therefore in doing so, their specific interests for a part of the system (some modules or some templates only) or their generic interest for the entire system were highlighted.



Participants sticking their names and institution on LIMS templates and modules



Participants were asked to stick their name on the templates of LIMS making a first stage for a stakeholder mapping, before drafting the “best bet” SoP’s for LIMS

Listing of the participants to the LIMS seminar in Angola

N O	SURNA ME	First NAMES	G E N D E R	DESIGNATION	POSTAL ADDRESS	Physical address	TEL EP HO NE + 244	MO BIL E +24 4	FA X + 244	EMAIL
1	Candi mba	Dina	F	Tecnica Superior de 2 classe			912 228 504			kakulocan.dimba@yahoo.com.br
2	Aboli a	Manu el Maudi	M	Chefe de Departamento de Producao, Tecnologia e Industria Animal	Minagri / ISV - CP 766	4 de Fevereiro N°57 - 4 andar Nº16 - Luanda	222 337 651	923 651 068 912 507 317	222 323 530	maidiabolia@yahoo.com.br dnap@ebonet.net
3	Morai s	Joaq uum	M	Coordenador do Curso de Veterinaria		Rua Vicente Ferreira	923 460 806			joaquim@yahoo.com.br
4	Luis Joao Zua	Angel o	M	Chefe do Departamento			923 567 304			-
5	Paca vira da Costa	Pedr o Lopes	M	Tecnico			926 104 633			pedrolopes@hotmail.com
6	Pinto	Norb erto Joao Soares	M	Chefe de Epidemiologia	Minagri / ISV	Rua Comandante Gika - Largo A. Jacinto - Edificio B. - Luanda	923 523 966 912 666 417	222 324 067		eubeto2002@yahoo.com
7	Bumb a	Anton io Luhame	M	Chefe de Seccao			923 669 309			-

8	Capitao	Cabo nde	M	Chefe do Departamento Provincial			923 303 255			
9	Cama langa	Joao Estevao	M	Chefe de Departamento	ISV - Kunene		917 676 519 923 221 313			
10	Miguel	Barb osa	M	Chefe de Departamento	CP 91 - Huila		927 524 293			
11	Mend es	Jose	M	Director	Namibe		923 289 007			
12	Dombolo	Edgar Felix Natanel	M	Chefe do Departamento Provincial de Luanda	Minader - CP 10578	Rua Comandante Gika - Largo A. Jacinto - Edificio B. Do Minader N°56/57 - 4 Andar Direita - Luanda	222 324 067	923 318 222	222 324 067	natanel90@hotmail.com dnap@ebonet.net
13	Domingos da Cruz	Ngueve Jovita	M	Chefe do Departamento do ISV-Bie			923 253 900 914 212 230			
14	Jose	Antonio	M		Minader / ISV	Departamento do ISV - Huambo	924 637 935			
15	Mendes de Carvalho	Joao	M	Medico veterinario Min. Agric.			924 631 299			iotacarvas@hotmail.com
16	Monteiro Destino	Jose	M	Tecnico Instituto Nacional de Estatistica-INE		Rua Ho Chi Minh	912 342 263 926			

							313 949		
1 7	Pais de Almeida	Teod oro Jorge	M	Chefe do Departamento Provincial de Benguela			227 231 390	923 465 406 914 101 726	jorgealmeida63@hotmail.com
1 8	Firmi no Pedro	Carlo s	M	Tecnico	CP 1215	INE - Rua Ho Chi Minh	222 320 430	923 617 901	carlospedro@ine.gov.ao
1 9	Costa Neto	Seba stiao Fernan do	M	Tecnico Medio Veterinario			923 613 006		
2 0	Da Silva	Domi ngod	M			GEPE	924 835 330		
2 1	Samo	Danie l	M	Chefe de Departamento		Rua Namibe	264 260 214	923 489 850	samo45@yahoo.com.br
2 2	Tulitil eni	Pedr o Tiberio	M	Chefe de Departamento		Largo A. Jacinto	928 771 118		
2 3	Quilo ssa Mambi	Afons o	M	Director Estação Zoot. do Lau Malange		Rua Amilcar Cabral nº45	222 372 876	923 402 963 912 686 840	afonsomamb@yahoo.fr kilossa51_afonso@hotmail.com
2 4	Mour ao Capitia	Luis Raul	M	Chefe de Departamento		ISV - Malange	923 714 351		
2 5	Do Couto	Adeli no Luis	M	Tecnico	ISV - Dpt SA	Largo A. Jacinto	912 203		adelino_rodrigues

	Rodrigues						924 923 804 856	@yahoo.com.br
26	Casmiro	Jose Luis Luemba	M	Chefe de Departamento	Minagri / Cabinda ISV		924 702 649	
27	Chitaca Muacasso	Antonio Miguel	M	Chefe de Departamento	Minagri / ISV - Lunda.Sul		928 089 222	
28	Nascimento	Ricardo	M	Chefe de Departamento - ISV	ISV - CP 10578	Avenida Comandante Gika - Edificio b - 4 andar - Largo A. Jacinto	222 324 067 926 253 491 222 324 067	ricardo16@yahoo.com.br
29	Dinis	Joaquim Joao Massolari	M	Chefe do Departamento de Sanidade Animal	Minader / ISV - CP 527	Av. Comandante Gika - Largo A. Jacinto - Bloco B N°55/56 - ala direita	222 324 067 923 617 709 222 324 067	laradinis2006@hotmail.com
30	Clemente	Xavier	M	Chefe de Departamento	CP 6	Direccao Provincial da Agricultura do Uije - Predio Rinaga	924 410 866	
31	Pedro Raul	Felizardo	M	Chefe de Departamento	Ministerio da Agricultura e do Desenvolvimento Rural - Servicos de Veterinaria - CP 527 ; 1257 ; 10578 - Luanda		923 550 862 222 324 067	felizardoraul@hotmail.com
32	Delgado Miranda	Alexandrino	M			Rua Amilcar Cabral n°45 - Luanda	222 372 876 923 319 414 222 372 873	admiranda110@yahoo.com.br
33	Sebastiao Felipe Manuel	Zulmira	F			Av. Comandante Gika - N°55/56 - Edificio B - 4 andar - ala esquadra dnapf	912 228 193	zulmiraf/@yahoo.com
34	Cassova Lopes	Stella	F	Chefe de Gabinete de Estatistica, Estudo e Projectos	CP 5682	Rue Amilcar Cabral N°45 - Luanda	222 372 876 924 912 688	monteirostell@yahoo.com.br

	Monteiro						912 351 247		
35	Agunaldo	Mutaleno	M	Chefe de Departamento provincial	Minagri / ISV	Rua Comandante Ngazi	923 872 939	254 260 175	-
36	Jose	Augusto	M	Chefe de Departamento - Lunda - Norte	Direccao Provincial da Ag.da Lunda Norte	28 de Agosto	925 231 233		-
37	Antonio Manuel	Joao Alfredo	M		Minagri / ISV		921 643 601		jama6500@yahoo.com.br
38	Sebastiao da Cruz	Francisco Higino	M	Chefe de Departamento	ISV - CP 68	Ndatando - rua de camabatela - N° 377 e	923 711 191 912 114 040	235 280 048	higinocruz@gmail.higilocruz14@yahoo.com
39	Antonio da Cunha	Isabelita	F	Chefe de Departamento	CP 527 - Gabinete Estudos Planeamento Estatisticas	Largo A. Jacinto - Rua da Quine Bissau - Viana/Vila	222 291 092	923 492 756	isabelita@yahoo.com.isabelitadacunha@yahoo.br
40	Sucumula	Jose Bonifacio	M	Chefe de Departamento		Largo A. Jacinto - Luanda	927 502 716		sucumula@yahoo.com.br
41	Dituta la	Lucas Simao	M	Director General	Institut de Investigacao Veterinaria - CP 5682	Rua Amilcar Cabral N°45 - Luanda	222 372 876	923 319 393 912 205 148	222 372 873
42	Felgueiras	Francisco Tomas	M	Director Estacao Zootecnica	Namibe - Av 4 ABRIL - 19		923 282 198 914		ftpfelq@yahoo.com.br

							248		
							282		
4 3	Santa na	Bern adette	F	Deputy General Director - Institute of Vet Services	Ministerio da Agricultura - CP 10578	Largo A. Jacinto - N° 56/57 Edificio B - 4 andar - ala Direita	923 222 326 803 684 465	222 133 324 917 067	neydesantana@hotmail.com dnap@etonet.net

Comments made during the LIMS seminar

How does LIMS operate vis-à-vis GIS? What does the progress of LIMS implementation look like? (The head of CVL)

How does LIMS function in respect to other information systems the country may have?

There is a system called LASER for livestock numbers and herd dynamics. What is the advantage of LIMS over LASER? (LASER is a CIRAD software for managing longitudinal monitoring systems on animal production performance (Angolese staff from the reaserach were trained in France on this software therefore the question)

The veterinary public health component is not well covered.

LIMS lacks module on animal feed. Is this a reflection of the weakness of APVM?

Who controls the access to LIMS? That is both the application and the portal. What part of the system is accessible with and without restriction?

Data is collected from primary sources such as livestock and commodity associations. In Angola these do not exist and those which exist are not strong enough. In such circumstances how easy would it be to collect data? What is the experience in other countries?

Press releases

The following press articles were collected. They reflect the importance given by the media to the event.

Cidades comem carne importada e meios rurais o produto nacional

Augusto Cuteta|

A carne importada continua ainda a ser a mais consumida entre os habitantes das zonas urbanas do país, segundo revelou em Luanda, a directora adjunta do Instituto de Serviços de Veterinária, Bernardete Santana.

Vários esforços têm sido desenvolvidos para que a actividade pecuária nacional possa ocupar um lugar de destaque, com vista a atingir os níveis de consumo verificados actualmente nas zonas rurais, onde a carne local é a mais consumida.

Apesar de divulgar a informação, Bernardete Santana preferiu não falar em estatísticas, quando se referiu ao consumo de carne proveniente do exterior por pessoas que vivem nas grandes cidades do país.

Bernardete Santana salientou que o Brasil, a Argentina, a África do Sul e alguns países da Europa são as origens de grande parte da carne consumida nas zonas urbanas de Angola.

Este quadro, relativo à informação pecuária, pode conhecer dias melhores. Desde sexta-feira, um sistema de gestão da informação pecuária começou a ser executado em Angola, numa recomendação dos Estados-membros da SADC.

O lançamento do sistema decorreu durante um seminário, realizado na capital do país, colocando Angola entre os 11 Estados da SADC que já iniciaram a execução do projecto. O sistema permite dotar a sociedade e as autoridades governamentais de elementos necessários à tomada de medidas preventivas ou correctivas para a salvaguarda do bem-estar das populações, tal como disse na abertura do seminário o vice-ministro da Agricultura, José Amaro Tati.

É importante salientar que o sistema de gestão da informação pecuária pode contribuir para que os técnicos tracem estratégias para fazer face a doenças como a peripneumonia, que são as que mais afectam os animais do país.

Bernardete Santana disse ao "Jornal de Angola" que "no nosso país não há ainda casos de doenças dos pequenos ruminantes, ao contrário do que noticiámos na nossa edição de segunda-feira. Existem registos deste tipo de casos na vizinha República Democrática do Congo", salientou.

O sistema de gestão de informação permite segura nça alimentar.

Sistema de gestão da informação melhora actividade pecuária

Augusto Cuteta|

Um Sistema de Gestão da Informação Pecuária começou a ser executado em Angola, que passou a aplicar uma recomendação dos Estados-membros da SADC.

Com o lançamento do sistema, que decorreu durante um seminário realizado nas instalações do complexo Futungo II, em Luanda, Angola passa a ser o 11º país da SADC

visitado por especialistas da organização para divulgação do projecto.

O vice-ministro da Agricultura, José Amaro Tati, disse que se pretende criar uma base de dados que possa ajudar no desenvolvimento pecuário. Para o governante, que procedia à abertura do seminário, a importância dos sistemas de informação e de monitoria reside no acompanhamento dos factores susceptíveis de afectar o processo de produção e o modo de vida das populações. O sistema permite dotar a sociedade e as autoridades governamentais de elementos necessários à tomada de medidas preventivas ou correctivas para a salvaguarda do bem-estar das populações.

Bernadete Santana, directora- -geral adjunta dos Serviços Nacionais de Veterinária, salientou que a garantia da segurança alimentar das populações passa fundamentalmente pelo desenvolvimento dos sectores agrário e pecuário.

Amaro Tati disse que a gestão correcta da informação pecuária é um valioso instrumento no controlo da situação sobre os efectivos e respectivas produções, infra-estruturas e recursos humanos, situação zoo-sanitária, marketing e comercialização e controlo de qualidade.

Outra grande vantagem do sistema, salientou Amaro Tati, é que a informação em tempo útil pode permitir aos técnicos competentes traçarem estratégias para fazer face a doenças como a gripe das aves, raiva e tripanossomias. A engenheira Bernadete Santana disse que a peripneumonia bovina, a peste suína e a dos pequenos ruminantes são as doenças que mais enfermam os animais do país. “Este sistema vai permitir acções com vista à melhoria dos níveis de bem-estar do animal, da sua produção, processamento e controlo da qualidade dos produtos da pecuária.

Background on AIMS and LIMS integration:

Two AIMS workshops were held in 2007 and 2008 in collaboration with SADC sister projects have been opportunities to sensitize the Member States (MS) on the expected achievement of AIMS:

- formation of **AIMS networks**,
- compilation of numerical data and key information at national and regional level by sub sector and given stakes – topics (data contributors perspective),
- Improvement of systems **interconnectivity** so that information is available from browsing in databases and in a portal (users perspective).

The following slides are summarizing the AIMS networking rationale (vision and plan) as established by the Mozambican AIMS participant in Pretoria in 2008. It represents an example of a proposed **vertical integration** towards the formation of an AIMS network in this country of SADC. Nevertheless from the original group of attendees at the **AIMS workshop** in Pretoria, none were present at our seminar.

LIMS into AIMS: List of Participants invited to the AIMS meeting Pretoria 2008 – From Ministry of Agriculture and other institutions: Angola:

AIMS team leader

Mr Valdemar Simos Morais

Head of Department, Food Security Office – MINADER

Av. Cte Gika, Larqo “Antonio, Tacinto”, Edificio B

Tel: 244 22 232 4941

Fax: 244 22 232 2029

E-mail: valdemorais288@hotmail.com

OBJECTIVOS DO SISTEMA NETWORK EM ANGOLA

- ♦**FACILITAR A ARTICULAÇÃO
INTERSECTORIAL DAS POLÍTICAS
RELACIONADAS C/ S.A.N.
ENVOLVENDO VARIOS MINISTÉRIOS E
SOCIEDADE CIVIL;**
- ♦**PARA MELHORAR AS CONDIÇÕES DE
S.A.N DE TODOS OS ANGOLANOS EM
ESPECIAL OS MAIS VULNERÁVEIS;**

Slides presented by the participant of Angola at the last AIMS workshop

PARA FAZER FUNCIONAR O SISTEMA DE NETWORK EM ANGOLA, É NECESSÁRIO:

- ❖ **MELHORAR A REDE TÉCNICA AO NÍVEL MUNICIPAL, PROVINCIAL E NACIONAL (MEIOS TÉCNICOS E HUMANO, E ESTIMULAR);**
- ❖ **DEFINIR O DESENHO DA ARQUITETURA DO SISTEMA (CRIAR INFRA-ESTRUTURAS DE DADOS P/ O CEN TRO NACIONAL DE DADOS), ESTATÍSTICOS E ESPACIAIS;**
- ❖ **(AS INFRA-ESTRUTURAS DE DADOS CONSTITUIRÁ O SUPORTE ESTRATÉGICO PARA A DECISÃO, AVALIAÇÃO E MONITORIZAÇÃO DE FENÓMENOS, DESDE A RECOLHA E TRATAMENTO DE DADOS ATÉ A SUA DISPONIBILIZAÇÃO EM FORMATO ANALÓGICO OU DIGITAL);**

PARTES QUE PODEM SER ENVOLVIDAS NO SISTEMA NETWORK - ANGOLA

- MINADER - (GSA) – **LIDER/DINAMIZADOR**
- UNACA – FEDERAÇÃO NACIONAL ASSOCIAÇÕES E COOPERATIVAS AGRÍCOLAS
- MINPLAN -(INE)
- MINCO
- MINPESCAS-(IPA) – **LIDER ADJUNTO**
- MINEA
- UNIVERSIDADES –
 - A. N. (Dto. BIOLOGIA) & F. C. AGRÁRIAS –Huambo
 - ONG'S NACIONAIS (ADRA E COJA)
 - ASSOCIAÇÕES EMPRESARIAIS E PROFISSIONAIS
 - OUTRAS

ESTRATÉGIAS A SEGUIR

- AO NÍVEL NACIONAL, DEFINIR O MODELO A UTILIZAR;
ANALISAR ESTRUTURA DE DADOS (ARQUIVO E GESTÃO);
MELHORAR E PADRONIZAR OS QUESTIONÁRIOS DE RECOLHA EM AMBOS OS NÍVEIS;
ANALISAR O PROCESSO DE TRATAMENTO DE DADOS (INTRODUÇÃO E VALIDAÇÃO);
- INSTALAR INFRA-ESTRUTURAS E TECNOLOGIAS;
- INICIALMENTE EFECTUAR CONTACTOS INFORMAIS E APÓS A FUNCIONABILIDADE DA REDE, PODER SE FORMALIZAR;
- AUMENTAR O NÚMERO DE PONTAS DE LANÇA NAS REDES MUNICIPAIS E PROVINCIAIS;
- FORMAÇÃO E CAPACITAÇÃO REGULAR A TODOS OS NÍVEIS EM PROCESSAMENTOS E ANÁLISE DE DADOS;
- ELABORAR-SE PLANO DE ACÇÃO COM A DURAÇÃO DE 1 ANO;

AGENDA of the LIMS SEMINAR

The agenda of the seminar is provided hereafter:



SADC/FANR/PRINT Livestock Project / Angola
Programa / Lanceamento do sistema LIVESTOCK INFORMATION
MANAGEMENT SEMINARIO de LANCEAMENTO DO SISTEMA (LIMS), Sexta
Feira 5 Dezembro 2008
Ministério da Agricultura e do Desenvolvimento rural
Complexo turistico de Belas – Luanda, ANGOLA

8:00 – 8:30 *Arrival & Registration / Chegada Registração*

8:30 - 08:45 *Introduction and welcoming remarks: Directors of Veterinary Services (DNSV) / Alocução do Director de Servicios de Veterinaria*

8:45 - 09:15 *Opening address by the PS / Alocução d Lanceamento do LIMS por o Secretario Geral MINADER*

09:15 – 09:45 *Tea Coffee Break / Pausa Café*

09:45 – 10:15 *Background of Agricultural Information and Management System (AIMS) and Livestock Information and Management System (LIMS) / A situação dos Sistemas de Informação Agricolais na SADC / AIMS e o Sistema LIMS do sector da Pecuaria – Dr. P. Bonnet*

10:15 – 10:30 *Discussions / Discussão*

10:30 – 11:00 *Introduction to LIMS / Introdução no LIMS - Dr. B. Bedane*

11:00– 11:15 *Discussions / Discussão*

11:15 – 12:15 *Demonstration of the LIMS reporting templates / Livestock Development - /Livestock Marketing and Trade (LMT) – Animal Production (AP) – Animal Health (AH) / Demonstração do sistema LIMS com os relatorios regionais harmonizados: Comercio e Marketing / Produção Animal / Saude Animal / Desenvolvimento do Sector da pecuaria*

12:15 – 12:30 *Discussions / Discussão*

12:30 - 13:00 *Demonstration of LIMS database – / Demonstração do software LIMS Dr. B. Bedane*

13:00 – 14:00 *LUNCH / Almoço*

14:00 -14:30: *Demonstration of LIMS database (cont)– Demonstração da Base de Dados LIMS Dr. B. Bedane*

14:30 -15:00: *Demonstration of LIMS/AIMS Portal - Demonstração do Portal Internet LIMS com a cartografia dinamica Dr. B. Bedane*

15:00 - 15:15: Discussions / Discussão

15:15 – 15:45 Tea Coffee Break / Pausa Café

15:45 – 16:15: *Data sources and networking with stakeholders / Participatory stakeholders mapping* – / Fonte de Dados sobre o Sector da Pecuária - Trabalho em Redes Profissionais com o LIMS Cartografia participativa com os actores do LIMS Dr. P. Bonnet

16:15 – 17:00 Discussions / Discussão

3-2. Training on LIMS

The training was carried out by the two following PRINT staff, in Spanish and Portuguese, with some help with French since some angolese trainees were also French speaking.

Trainers	Tel. No.	Fax No.	Cell No	E-mail	Postal address	gender
SADC Chief Technical Adviser FANR PRINT Dr. Pascal Bonnet	+267 3951863 ext 5124 Direct Line: 3959838	PRINT: +267 3959834 FANR: +267 3924099	+267 72734789	Pbonnet@sadc.int Pascal.bonnet@cirad.fr	SADC FANR PRINT P/Bag 0095 Gaborone Botswana	Male
SADC Information Specialist FANR PRINT Dr. Berhanu Bedane	+267 3951863	PRINT: +267 3959834 FANR: +267 3924099		bbedane@sadc.int	SADC FANR PRINT P/Bag 0095 Gaborone Botswana	Male

List of the 11 participants to the LIMS training

List of 11 participants to the LIMS training in Angola: - December 2008 Luanda Angola

NO	SURNAME	First NAMES	GENDER	DESIGNATION	POSTAL ADDRESS	Physical address	TELEPHONE +244	MOBILE +244	FAX +244	EMAIL
1	Antonio da Cunha	Isabelita	F	Chefe de Departamento	CP 527 - Gabinete Estudos Planeamento Estatisticas	Largo A. Jacinto - Rua da Guine Bissau - Viana/Vila	222 291 092	923 492 756		isabelita@yahoo.com isabelitadacunha@yahoo.br
2	Firolino Pedro	Carlos	M	Coord. do IPG	INE - Instituto Nacional Estatisticas Ho Chi Minh - CP 1215	Rua Revolução de Outubro Maianga		923 617 901	222 320 430	carlopedro@inegu.ao
3	Alexandre Joao da Silva	Isabel	F	Tecnica Media de planificação	Minagri / GEPE - Largo A. Jacinto	Rua cermica do Cazenga B. Hoji ya Henda		912 301 305		isaale2joao ?
4	Afonso	Paulo Joaquim Adelino	M	Chefe Secção de Saude Publica Veterinaria	Minagri / ISV	Largo A. Jacinto 4/andar/Luanda /Angola	222 324 067	923 345 067	222 324 067	pajafonso2002@yahoo.com.br
5	Pedro Raul	Felizardo	M	Chefe de Departamento	Ministerio da Agricultura e do Desenvolvimento Rural - Serviços de Veterinaria			923 550 862	222 324 067	felizardoraul@hotmail.com

				- CP 527 ; 1257 ; 10578 - Luanda					
6	Cassova Lopes Monteiro	Stella	F	Chefe de Gabinete de Estatistica , Estudo e Projectos	CP 5682	Rue Amilcar Cabral N°45 - Luanda	222 372 876	924 912 688 912 351 247	monteirostella@yahoo.com.br
7	Dombolo	Edgar Felix Natanel	M	Chefe do Departamento Provincial de Luanda	Minader - CP 10578	Rua Comandante Gika - Largo A. Jacinto - Edificio B. Do Minader N°56/57 - 4 Andar Direita - Luanda	222 324 067	923 318 222	222 324 067 natanel90@hotmail.com dnap@ebonet.net
8	Pinto	Norberto Joao Soares	M	Chefe de Epidemiologia	Minagri / ISV	Rua Comandante Gika - Largo A. Jacinto - Edificio B. - Luanda		923 523 966 912 666 417	222 324 067 eubeto2002@yahoo.com
9	Do Couto	Rodrigues	M	Tecnico	Minagri / ISV - CP 10578	Largo A. Jacinto	222 324 067	912 203 924 923 804 856	adelinorodrigues@yahoo.com
10	Ricardo	Nascimento	M	Chefe de Departamento de Sanidade Animal	Minagri / ISV	Rua Comandante Gika - Largo A. Jacinto - Luanda	222 324 067	926 253 491	222 324 067 ricardona16@yahoo.com

1 1	Abolia	Manuel Maudi	M	Chefe de Departamento de Produção, Tecnologia e Indústria Animal	Minagri / ISV - CP 766	4 de Fevereiro Nº57 - 4 andar Nº16 - Luanda	222 337 651	923 651 068 912 507 317	222 323 530	maidabolia@yahoo.com.br dnap@ebonet.net
--------	--------	--------------	---	--	------------------------	---	----------------	----------------------------------	----------------	--

Agenda of the LIMS training in Angola



*SADC PRINT Livestock Project in collaboration with the Ministry of Agriculture of the
Republic of Angola*

**PRINT Projecto em colaboração com o Ministério da Agricultura e do
Desenvolvimento rural
República de Angola**
Programa por a Formação do sistema LIMS / Formação de Formadores
8 - 10 Dezembro 2008
Lugar – Ministério da Agricultura Luanda Angola

DIA 1 – Sexta Feira 8 Dezembro 2008

8:00 – 8:15 *Introduction - Training objectives / Introdução e Objectivos da Formação*

8:15 - 9:00 *Installation / Instalação do software*

1. First time installation / Primeira instalação
2. Key files and folders / Ficheiros importante depois da instalação
3. Uninstalling / Eliminar of software
4. Re-installing / Instalar de novo

9:00 – 10:30 *Basic concept of LIMS operation / Conceito de base do software*

1. Opening, navigation and closing the application / Abrir, navegar fechar
2. Menu and sub-menu structure / Menu e estructura do menu

10:30 – 11:00 **TEA BREAK / Pausa Café**

11:00 – 11:30 *Basic concept of LIMS operation (Continued) / Conceito de base do software (continuando)*

3. Standard tool bar and other GUI / Interface e Barra de menu

11:30 – 12:00 *Administration: Access Control / Administração e Controlo de acesso*

1. Creating users / Criar utilizadores
2. Assigning roles and granting rights / Atribuir funções para usar o sistema

12:00 – 13:00	<i>Data entry, modification and saving / Entrar Dados, modificar e salvar</i>
	1. Livestock numbers and composition (Module 1 – Template and database) / Relatorio sobre os Effectivos animais (Modulo 1) Relatorio e ecran
13:00 – 14:00	LUNCH / Almoço
14:00 - 14:30	<i>Data entry, modification and saving (continued) / Entrar Dados, modificar e salvar (continuando)</i>
	2. 1. Livestock numbers and composition (Module 1 - Template and database) / Relatorio sobre os Effectivos animais (Modulo 1) Relatorio e ecran
14:30 – 15:30	2. Livestock Products (Module 3 - Template and database) / Relatorio sobre os Productos animais (Modulo 3) Relatorio e ecran
15:30 – 16:00	TEA BREAK / Pausa Café
16:00 – 17:00	3. Livestock Trade (Module 5 - Template and database) Relatorio sobre o comercio Internacional (Modulo 5) Relatorio e ecran

DIA 2 – Segunda feira 9 Dezembro 2008

8:00 – 9:00	<i>Revision of day 1 - Discussion / Revisão do dia um</i>
9:00 – 10:30	<i>Data entry, modification and saving (continued) / Entrar Dados, modificar e salvar (continuando)</i>
	3. Livestock Infrastructure (Module 6 - Template and database) Relatorio sobre as infraestructuras (Modulo 6) Relatorio e ecran
10:30 – 11:00	TEA BREAK / Pausa Café
11:00 – 11:30	<i>Data entry, modification and saving (continued) / Entrar Dados, modificar e salvar (continuando)</i>
	4. Meat Inspection (Module 7 - Template and database) Relatorio sobre a inspecção da carne (Modulo 7) Relatorio e ecran
11:30 – 13:00	<i>Data entry, modification and saving (continued) / Entrar Dados, modificar e salvar (continuando)</i>

5. Laws, regulations and acts (Module 9 - Template and database)
Relatorio sobre a legislação do sector (Modulo 9) Relatorio e ecran

Data entry, modification and saving (continued) / Entrar Dados, modificar e salvar (continuando)

6. Disease Report (Module 10 - Template and database)
Relatorio sobre a notificação dos surtos de doenças animais (Modulo 7) Relatorio e ecran

13:00– 14:00 LUNCH / Almoço

14:00 – 15:30 *Building queries, generating reports and exporting query results / Construir e Pedir requerimentos / Fazer Relatorios et Exportar / Salvar em Excel*

1. Livestock numbers and composition (Module 1) /Effectivos animais M1
2. Livestock Products (Module 3) / Produção animal M3

15:30 – 16:00 TEA BREAK/ Pausa Café

**16:00 – 17:00 3. Livestock Trade (Module 5) / Comercio internacional M5
Relatorio sobre o comercio internacional (Modulo 5) Relatorio e ecran**

DIA 3 – Terça Feira 10 Dezembro 2008

8:00 – 9:00 *Revision of day 2 - Discussion / Revisão*

9:00 – 10:30 *Building queries, generating reports and exporting query results / Construir e Pedir requerimentos / Fazer Relatorios et Exportar / Salvar em Excel*

4. Meat Inspection (Module 7) / Inspecção da carne
5. Disease Report (Module 10) / Notificação de Doenças animais

10:30 – 11:00 TEA BREAK / Pausa Café

11:00 – 11:30 *Building queries, generating reports and exporting query results / Construir e Pedir requerimentos / Fazer Relatorios et Exportar / Salvar em Excel*

5. Disease Report (Module 10) Cont. / Notificação de Doenças animais Contd.

11:30 – 13:00 Data exporting for further analysis / Exportar Dados para analise estatistica

13:00 – 14:00	LUNCH / Almoço
14:00 - 15:30	<i>Administration / Administração do sistema</i>
	1. <i>Data Management: sending and receiving files (electronic reports)</i> / Gestão do sistema LIMS mandar e receber um ficheiro de dados
	2. <i>Data Management: backup and restore</i> / Arquivamento da Base de dados restauração da base de dados (depois de instalar uma nova versão do software)
15:30 – 16:00	TEA BREAK/ Pausa Café
16:00 – 17:00	<i>General Discussion / Discussão geral</i> <i>Installation and configuration of clean copy of the database /</i> <i>Instalação da versão final do Software</i>
	<i>End of training course / Fim da formação</i>

The training aims at sensitizing the **future trainers** to the rationale of LIMS system. Obviously it is also to train them on the **LIMS application functionalities** and the **templates contents**, so that they become familiar with the entire concepts and system. Besides, it is also expected that from the training, participants will be in a position to better design and produce **specific training material** derived from the **generic training material** provided by PRINT, i.e. training manuals for trainers and for data clerks (still to be finalized and translated), with specific examples and illustrations selected from the country context.

The system is based on the principle: “***if you master one template, you master them all***”, as most screens and templates share a similar tabular presentation.

Eleven (11) staff were trained as **future trainers for Angola**.

1. Antonio da Cunha Isabelita
2. Firolino Pedro Carlos
3. Alexandre Joao da Silva Isabel
4. Afonso Paulo Joaquim Adelino
5. Pedro Raul Felizardo
6. Cassova Lopes Monteiro Stella
7. Dombolo Edgar Felix Natanel
8. Pinto Norberto Joao Soares
9. Do Couto Rodrigues
10. Ricardo Nascimento
11. Abolia Manuel Madi



The full picture of trainees with Dr Bedane



The audience listening to explanations by Dr Bedane



The training room was equipped with 11" eee Asus mini-laptops" though some participants run their personal computers



Participants were using the Portuguese version of the LIMS screens so that they could make comments on the current translation (some mistakes were detected) and were also consulting the handout (in English) and some LIMS manuals already available (Animal Health)



All harmonized templates and screens were visited with the main functionalities of LIMS system and software's: here Alexandre Joao da Silva Isabel and Manual Abolia



Training handouts in English were distributed (also as files) plus the draft SoP sheet and the Comment sheet adapted to Portuguese: here Ricardo Nascimento and Antonio da Cunha Isabelita



Cassova Lopes Monteiro Stella



Pinto Norberto Joao Soares



Dombolo Edgar Felix Natanel and Afonso Paulo Joaquim Adelino



Firolino Pedro Carlos and Pedro Raul Felizardo



Do Couto Rodrigues

The training room accommodated for 11 staffs plus 2 trainers Dr Bonnet and Dr Bedane. Eleven “eee ASUS” mini laptops computers from PRINT were available, all on OS XP and Access 2003 reducing hence the loss of time due to adjusting LIMS on other systems Access 2007 and Vista (though LIMS can adapt the other systems and OS). External QWERTY keyboard were available to switch to keyboards in Portuguese setting or English setting. In such a training with the LIMS software , all PC must be set up with regional parameters as **English UK** to properly run LIMS software (decimal is a dot and thousand space is allowed). This will also be a prerequisite when running LIMS in MS (therefore to be put as a warning message in the training material)².

We faced some probleme for installing LIMS on some personal computers, where OS and Access were not “genuine installations”. We therefore recommend to only install LIMS on computers having received an official version of Windows and to use the free and genuine runtime Access instead of MS Access when there is a doubt on the origin of the software.

Validation of Partitions

The concept of partitions of a country is generally well understood (= Administrative divisions and Cadastral Boundaries on one hand and any Technical division used for the purpose of managing Livestock issues on the other hand). Nevertheless, the alternative use of **technical partitions** versus **administrative partition** must be discussed in depth

² Refer to Annex X for more explanation

during a LIMS adoption mission, as these are key features into LIMS to insure interconnectivity with other information chains.

This aspect of the LIMS allows capturing data from various sources by respecting the **observation units** they originally use, provided that they are populated as reference parameters prior to any data entry or data import. It therefore allows to interoperate and interconnect with other systems by assuring that one can import/export some information / data in compliance with the relevant observation units required (i.e. with logical and geographical compliance and therefore direct GIS interconnectivity).

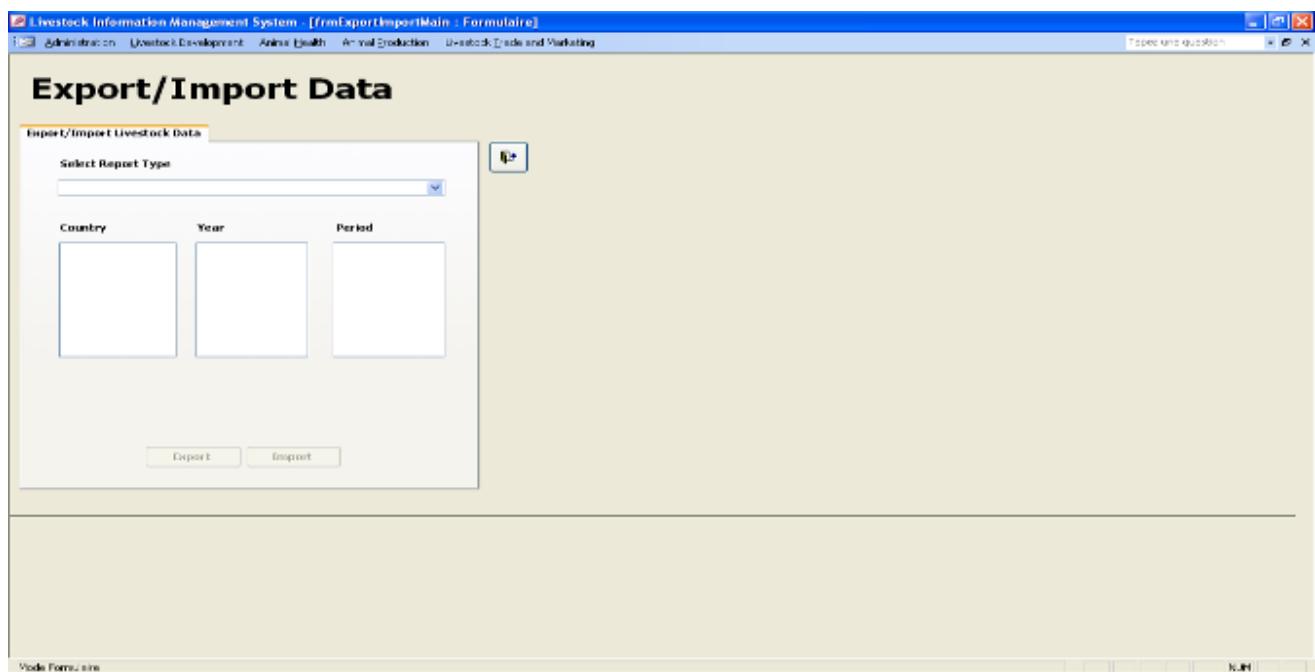
Country	Partition Type	Partition Level
Angola	Administrative	1
Angola	Administrative	2
Angola	Technical	1
Angola	Technical	2
Botswana	Administrative	1

Partition Name	Parent Partition	Start Date	End Date	Date Modified	Modified By
Bengo		01/01/2008	01/02/2008	01/01/2008	admin
Benguela		01/01/2008	01/01/2008	01/01/2008	admin
Bie		01/01/2008	01/01/2008	01/01/2008	admin
Cabinda		01/01/2008	01/01/2008	01/01/2008	admin
Cuando Cubango		01/01/2008	01/01/2008	01/01/2008	admin
Cuanza Norte		01/01/2008	01/01/2008	01/01/2008	admin
Cuanza Sul		01/01/2008	01/01/2008	01/01/2008	admin
Cunene		01/01/2008	01/01/2008	01/01/2008	admin
Huambo		01/01/2008	01/01/2008	01/01/2008	admin

The LIMS screen that allows to pre-populate and prepopulate **administrative** and technical **partitions** of a country (this must be reflected at SADC level as SADC secretariat will compile data using the same partition's lists shared with countries).

For SADC purpose, it needs to be populated with at least the **ADMIN2 level** of a country (generally named a “district”, and it refers to the ISO standard for coding), so that all data are aggregated at such level and sent to SADC secretariat accordingly.

Nevertheless for the national utilisation of LIMS, one can think to implement a rather more detailed set of zones (ADMIN3, or TECHNICAL partitions like the Dip Tank catchments areas etc..) in the future. Such level of information will remain in the **national LIMS database**, since only aggregated data at ADMIN2 level will be sent to SADC for **regional compilation** in Botswana.



The facility that allows export of data or import shall soon allow to select the partitions of preference for data exchange.

Interconnectivity between systems: geographical compliance of observation units:

As an example, if data shall be imported into LIMS by Livelihood zones from an external database like DEVinfo, this set of partitions must be populated into LIMS, thanks to the technical partition facility predefined in such a way. Or if animal census data (Module 1 of LIMS) shall be exported by dip tank or crush pens zones, or by vaccination zones, LIMS can export such information to be inputted in any other system, including a GIS, provided that the parameters were added.

For the purpose of the demonstration, one will take the example of **DEVinfo** in Angola, an information system developed under the auspice of UNICEF to monitor the accomplishment of the MDG, and generally implemented in collaboration with national CSO's. We were not in a position to get access to the database though and we can only derive a few examples from the similar database in Mozambique ESDEM.

DEVinfo Angola is managed by the INE, Instituto Nacional De Estatistica

Mr Joaquim Flavio de Sousa Couto, Director General,	Instituto Nacional De Estatistica Rua Ho-Chi-Min P O Box 1215 Luanda	Tel. 244 2 320430/323200 Fax. 244 2 320430 Email. flaviocouto@ine.gv.ao / contas@ebonet.net	
---	--	--	--

Angola - di Wiki - Mozilla Firefox

navigation

- Main Page
- Community Portal
- Country FactSheets
- Recent Changes
- About di Wiki
- Random Page
- Help

search

toolbox

- Upload file
- Printable version
- Permanent link

[page](#) [discussion](#) [new source](#) [history](#)

Angola

Below is the latest information on Angola's progress in implementing DevInfo.

[Click here to download and submit a new DevInfo in Action Report](#)

[Click here to download and update this Country Factsheet](#)



Contents [hide]

- 1 General Overview
- 2 Institutional Support
- 3 Progress in DevInfo Implementation
- 4 UN Joint Programme on DevInfo

General Overview

Adaptation: ***

Implementing Agency: Dra Silva Constança, Ministry of the Planning

Homepage: ***

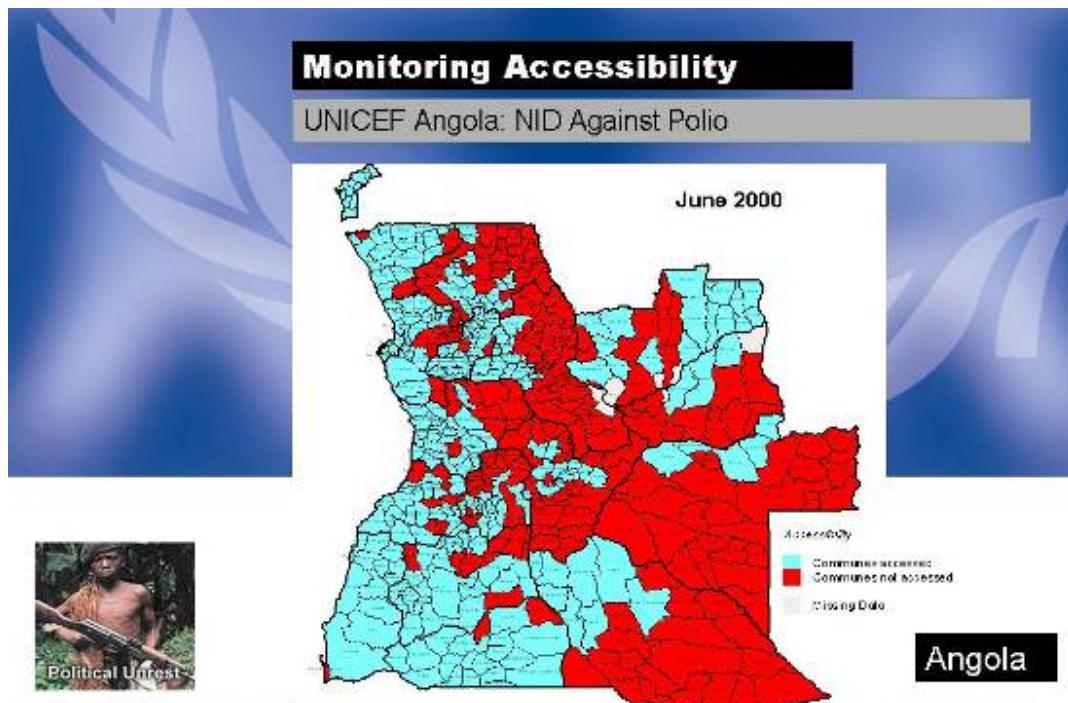
Databases: ***

Web-Site: ***

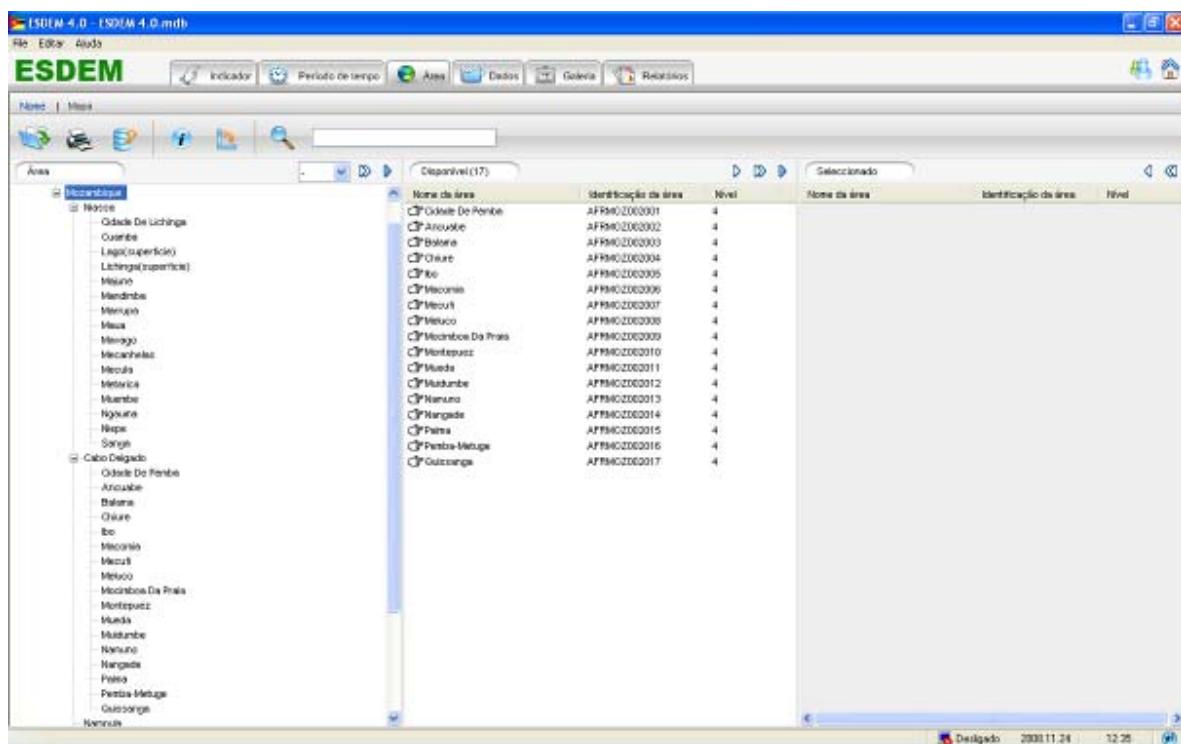
Focal Point: Nanga S. Andre, Jean Benoit Manhes

E-mail: nanga.onro@undp.org.ao,
jmanhes@unicef.org.ao

Last updated: 2007-03-14



The importance of the mapping unit for exchanging information: here map on accessibility parameters to health services



Some examples of country partitions which are implemented into DEVinfo in **Mozambique** (ESDEM: here Admin zones highlighted).

The screens of DEVinfo ESDEM show how partitions are implemented in such an outside system, here only Administrative divisions are implemented (in Zambia or Malawi the same system encompasses livelihood zones)

Here we can read the selection made for area names (admin in such case = ADMIN1and2 = the provinces and districts). Before exporting data from DEVinfo one should select the proper *zoning regime* that one needs. Some data may have been captured under the administrative zoning principle, whereas some other could be under a technical partition principle (like livelihood zones, health zones). Finally all can be overlaid in an adapted GIS.

Bridging data from LIMS to DEVinfo and vice versa will allow for some exploratory analysis like analysing geographical correlation (also called ecological correlations) between some MDG indicators and LIMS indicators, e.g. mortality under 5 years of age in districts (source DEVinfo) against % of HH rearing LS (source LIMS), or production of a given protein (animal product) in districts.

The screenshot shows a software application window titled "ESDEM 4.0 - ESDM 4.0.mdb". The menu bar includes "File", "Editar", and "Ajuda". The toolbar contains icons for "Indicador", "Periodo de tempo", "Área", "Dados", "Galeria", and "Relatórios". Below the toolbar is a navigation bar with links to "Exibir", "Fonte", "Unidade", "Sub-grupo", "Estatísticas", "Calcular", "Quadro", "Gráfico", and "Mapa". A toolbar below the navigation bar includes icons for file operations like Open, Save, Print, and Search. A status bar at the bottom right shows "Desligado", "2008.11.24", "13:10", and a user icon.

The main content area displays a table with the following columns: "Período de temp.", "Identificação", "Nome da área", "Indicador", "Valor dos dado", "Unidade", "Sub-grupo", and "Fonte". The table lists data for 2003 and 1997 across various districts (Gaza, Cabo Delgado, Nampula, Zambézia, Tete, Manica, Inhambane, Niassa, Maputo, Cidade de Maputo, Sofala, and Sofala Rural). The "Indicador" column consistently shows "Taxa de mortalidade abaixo de 5 anos". The "Fonte" column for 2003 entries is "MOZ_INE, Inquérito Demográfico de Saúde Moça...", and for 1997 entries is "MOZ_INE, II Recenseamento Geral da População...". The "Valor dos dado" column provides numerical values such as 156, 241, 220, 123, 206, 184, 149, 206, 108, 89, 205, 273.6, 245.4, 200.3, 203.3, 144.3, 99.5, 203.3, 263, 245.3, 221.9, 236.6, 314.3, 311.1, 303.6, 213, 131.7, 288, 287.9, 300.3, and 209.4. The "Unidade" column indicates "Por 1.000 nascidos vi... Total" or "Masculino/Feminino". The "Sub-grupo" column is mostly "Total" but includes "Rural" for some entries.

Preparation of an exploratory analysis like analysing geographical correlations between some indicators of development

Some Generic Partitions, 1.Admin, 2.; have been validated in Angola³ and we provide them into the annex and some elements in the following paragraphs. The **Web-mapping** facility under the AIMS portal cf. <http://LIMS.sadc.int> also requires consistent correspondence between partitions implemented on the web mapping portal and into LIMS.

Administrative partitions (AP)

Hierarchical partitions / divisões administrativas,

Administratively, each of the **18 provinces** in Angola has **Districts (Município)**, a total of **163 Município** are known so far, in existing **official databases**

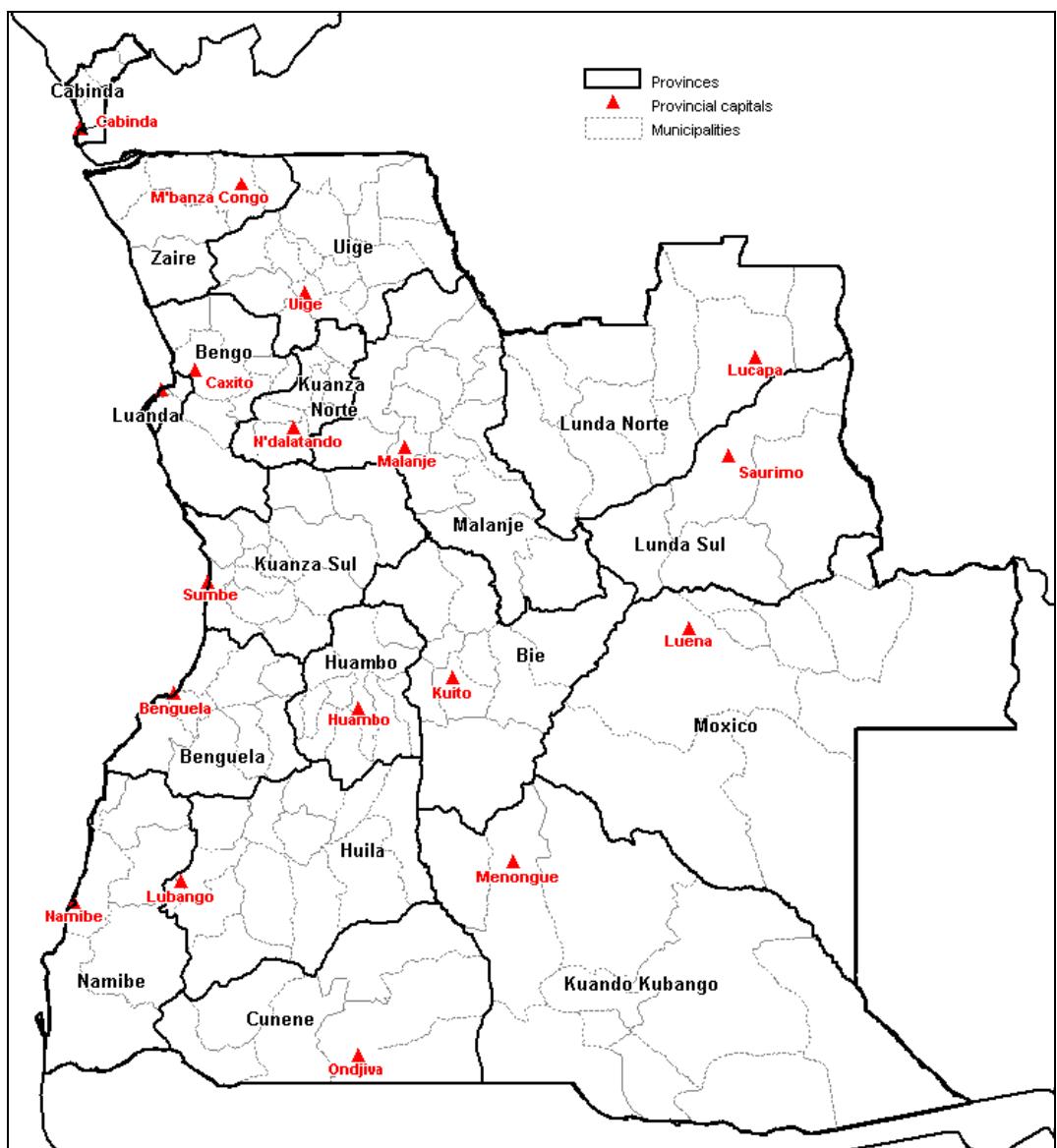
Provinces / provincias

The ADMIN1 partitions as implemented into LIMS are shown in the annexes. They will be edited according to sources validated during the training.

Districts / Município

The ADMIN2 partitions as implemented into LIMS are shown in the annexes. They will be edited according to sources validated during the training.

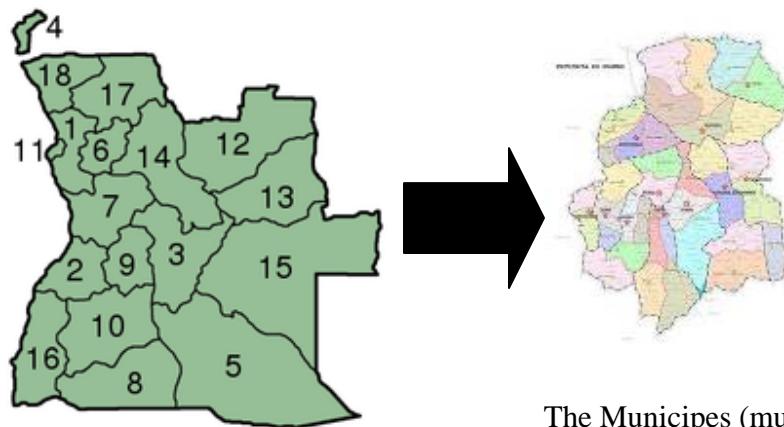
³ Most sources of geographical data were explored during the first situation analysis undertaken in phase one of LIMS cf. the report, though we complemented this on the occasion of the mission.



The map of Angola with Provinces and Municipality demarcated, plus their capitals.

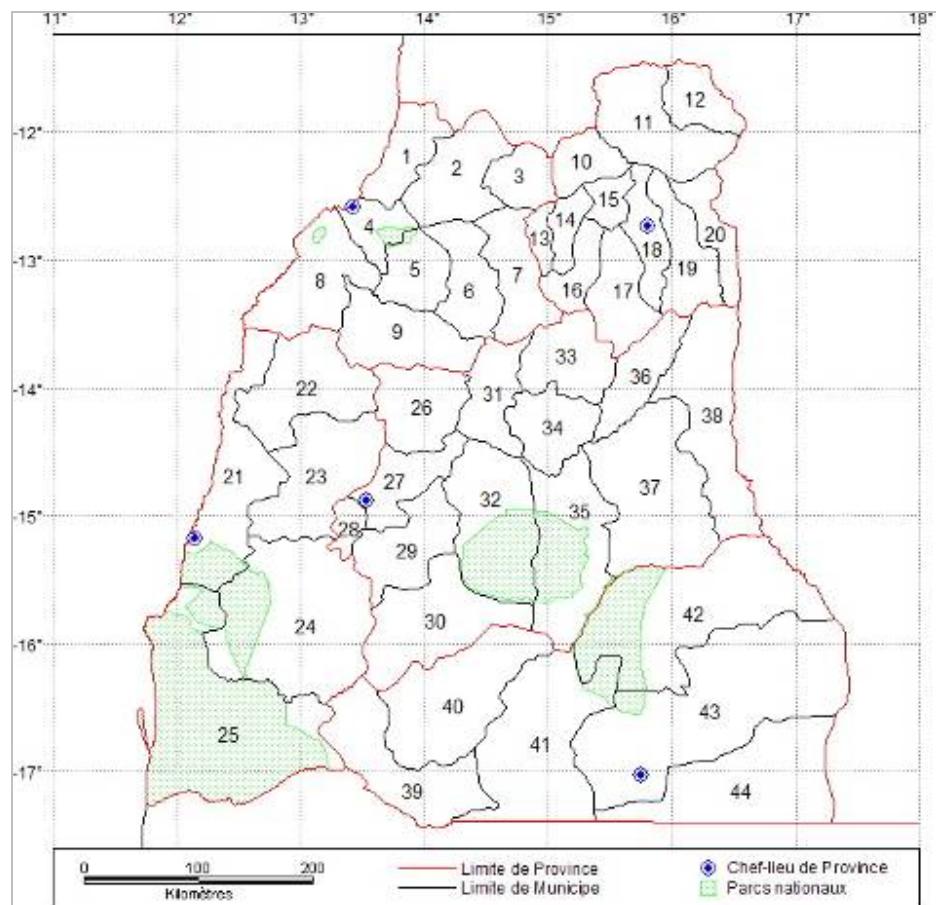
Communes

We could also add the level of communes as ADMIN3 in the system.



The 18 provinces of Angola (ADMIN1)

The Municipalities (municipalities) of Huila (Province number 9) as a second admin level ADMIN2 of HUILA province



Administrative Division of some central provinces (source FAO study in french).

Other sources of information can be also mobilized to cross check the information

Wikipedia: Angola is divided into [eighteen provinces](#) (*províncias*) and [163 municipalities](#) (Source: Ministry of Planning, 2003)

<p>1. <u>Bengo</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Ambriz</u>, • <u>Bengo</u> • <u>Dande</u> • <u>Icolo</u> • <u>Muxima</u> • <u>Nambuangongo</u> <p>2. <u>Benguela</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Lobito</u> • <u>Bocoio</u> • <u>Balombo</u> • <u>Ganda</u> • <u>Cubal</u> • <u>Caimbambo</u> • <u>Baia-Farta</u> • <u>Chongorói</u>. <p>3. <u>Bié</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Andulo</u> • <u>Nharea</u> • <u>Cunhinga</u> • <u>Chinguar</u> • <u>Chitembo</u> • <u>Catabola</u> • <u>Camacupa</u> • <u>Cuemba</u>. <p>4. <u>Cabinda</u></p> <p>5. <u> Quando Cubango</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Cuchi</u> • <u>Cuangar</u> • <u>Cuito</u> • <u>Rivungo</u> 	<ul style="list-style-type: none"> • <u>Cuanavale</u> • <u>Mavinga</u> • <u>Calai</u> • <u>Dirico</u> • <u>Longa</u>. <p>6. <u>Cuanza Norte</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Cazengo</u> • <u>Dembos</u> • <u>Bula Atumba</u> • <u>Bolongongo</u> • <u>Ambaca</u> • <u>Quiculungo</u> • <u>Samba Caju</u> • <u>Banga</u> • <u>Gonguembo</u> • <u>Pango Aluquem</u> • <u>Cambambe</u> • <u>Golungo Alto</u> • <u>Lucala</u>. <p>7. <u>Cuanza Sul</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Porto Amboim</u> • <u>Seles</u> • <u>Conda</u> • <u>Amboim</u> • <u>Quilenda</u> • <u>Libolo</u> • <u>Mussende</u> • <u>Quibala</u> • <u>Waku-Kungo</u> • <u>Cassongue</u> • <u>Ebo</u>. <p>8. <u>Cunene</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Cahama</u> • <u>Kuvelai</u> • <u>Namakunde</u> • <u>Santa-Clara</u>
--	--

<ul style="list-style-type: none"> • <u>Xangongo</u> <p>9. <u>Huambo</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Huambo</u> • <u>Caala</u> • <u>Ekunha</u> • <u>Longonjo</u> • <u>Ukuma</u> • <u>Bailundo</u> • <u>Tchinjenje</u> • <u>Mungo</u> • <u>Katchiungo</u> • <u>Tchicala Tcholoanga</u> • <u>Londuibambi</u> <p>10. <u>Huila</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Quilengues</u> • <u>Humpata</u> • <u>Chibia</u> • <u>Chiange</u> • <u>Quipungo</u> • <u>Caluquembe</u> • <u>Caconda</u> • <u>Chicomba</u> • <u>Matala</u> • <u>Chipindo</u> • <u>Kuvango</u>. <p>11. <u>Luanda</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Cacuaco, Viana</u> • <u>Cazenga</u> • <u>Ingombota</u> • <u>Kilamba Kiaxe</u> • <u>Maianga</u> • <u>Rangel</u> • <u>Samba</u> • <u>Sambizanga</u>. <p>12. <u>Lunda Norte</u></p> <p>Municipalities</p>	<ul style="list-style-type: none"> • <u>Shah-Muteba</u> • <u>Cuango</u> • <u>Capemba-Camulemba</u> • <u>Lubalo</u> • <u>Caungula</u> • <u>Cuilo</u> • <u>Chitato-Dundo</u> • <u>Lucapa</u> • <u>Caumbo</u>. <p>13. <u>Lunda Sul</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Saurimo</u> • <u>Cacolo</u> • <u>Dala</u> • <u>Muonda</u>. <p>14. <u>Malanje</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Massango</u> • <u>Marimba</u> • <u>Cunda-dia-Baza</u> • <u>Caombo</u> • <u>Calandula</u> • <u>Cacuzo</u> • <u>Cuaba Nzogo</u> • <u>Mucari</u> • <u>Quela</u> • <u>Cambundi-Catembo</u> • <u>Quirima Cangandala</u> • <u>Luquembo</u>. <p>15. <u>Moxico</u></p> <p>Municipalities</p> <ul style="list-style-type: none"> • <u>Alto Zambeze</u> • <u>Bundas</u> • <u>Camanongue</u> • <u>Cameia</u> • <u>Léua</u> • <u>Luau</u> • <u>Luacano</u> • <u>Luchazes</u> • <u>Moxico (municipality)</u> <p>16. <u>Namibe</u></p>
---	---

Municipalities	<ul style="list-style-type: none"> • Bibala • Camacuio • Namibe • Tombua • Virei
17. Uíge	
Municipalities	<ul style="list-style-type: none"> • Zombo, Quimbele • Damba • Mucaba • Bungu • Macocola • Bembe
18. Zaire	<ul style="list-style-type: none"> • Buengas • Sanza Pombo • Alto Cauale • Puri • Negage • Quitexe • Ambuila • Songo.

Technical partitions (TP)

Veterinary management zones and partitions

When it comes to technical structure, the lowest **Veterinary Services level and structure** in the country is the **Health Post (FS formaçao sanitaria)**. This has basic facilities such as **dipping tank, crush pen, office and a room** for the person in charge. Such Health Post is manned by either a Middle Level Technician (*Tecnico medio*) or Community Livestock Technical Assistant. Almost every district in the Southern high livestock producing provinces has at least one Health Post. There are some communes with high livestock potential where there are more Health Posts. For operational reasons, two or more districts are grouped together to form **Livestock Zones**. A number of Health Posts in these Livestock Zones and staff members working there are supported and supervised by a veterinarian. The exact number and distribution of Health Post in the country is not known.

A list of DIP-tanks (**tanque banheiros / equivalent then to FS formaçao sanitaria**), seen as zones (catchement areas of such infrastructure), could be implemented in LIMS if there is a need at national level. In general a few **villages** are allocated a Dip Tank, therefore the concept of DT here is not really the infrastructure (as a dot) but rather the catchement area it represents. Such feature can also be used also in the LIMS Module 10 or any any module where location of an event (e.g. outbreak) must be indicated with reference to the proximity of a such an identifiable feature (e.g. a village, or by indicating to which small zone the foci belongs to, like DT, FS etc..).

Therefore in Module 10 the animal population of a DIP tank catchement area (census from a certain category) can be taken as a denominator for computing epidemiological rates, therefore becoming a proxy for population at risk PAR.

Other technical partitions

National parks



National parks can be also captured as Technical zones / partitions in Angola

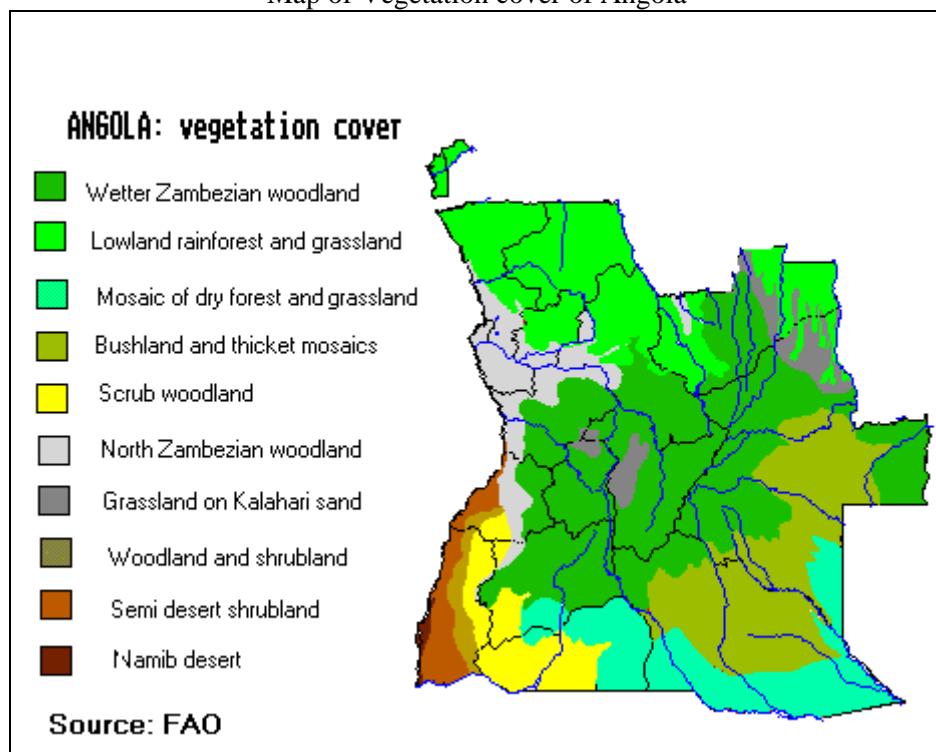
The agro ecozones AEZ of Angola.

Map of the AEZ of Angola highlighting the particular central plateau (Highlands), source FAO



Land Use zones

Map of Vegetation cover of Angola



Vegetation cover of Angola

Other zones (free of disease = status) could be also implemented as TP as there are some developments of **OIE zoning** in Angola.

Disease control zones: Tse tse



Tse Tse and disease distribution in Angola with Control areas

The Farming systems zones

Excerpts from a FAO study in Angola explaining the Dairy shed complex in the highlands of Angola

Le plateau central / zone nord-est : altitude généralement supérieure à 1.500 m, température moyenne annuelle 19-20 °C, pluies entre 1100 (sud) - 1400 (centre est) mm/an, zone adaptée à la

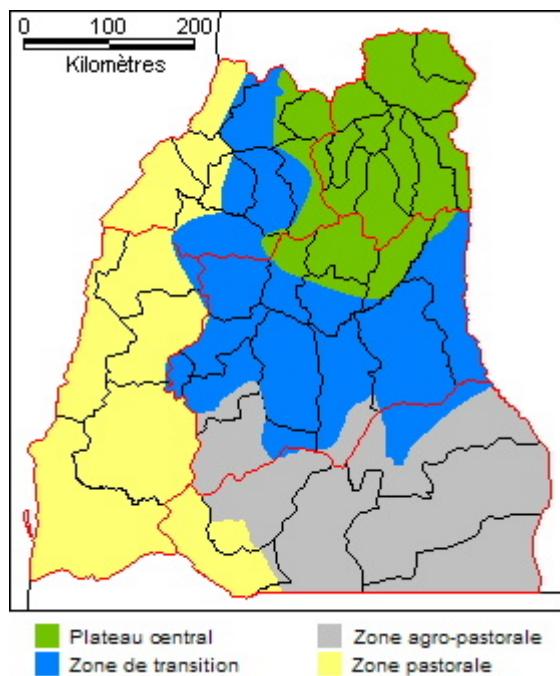
production extensive de céréales, pommes de terre, patates douces, blé, café et manioc. L'agriculture y a une importance prédominante par rapport à l'élevage.

La zone de transition / bande qui délimite le plateau central à l'ouest et au sud : altitude comprise entre 800 - 2000 m, pluviométrie qui diminue du centre vers la périphérie et varie entre 1100 - 800 mm/an, systèmes de production mixtes dont les principales cultures sont le maïs, le sorgho et le haricot rouge. L'élevage y est principalement sédentaire et son importance s'accroît en se rapprochant des zones plus sèches de la côte et du sud.

La zone agro-pastorale / zone sud-est : climat semi-aride, pluviométrie qui diminue du nord au sud et varie entre 700 - 400 mm/an. Selon les années et la pluviométrie, l'élevage ou l'agriculture peuvent devenir l'activité la plus importante de l'exploitation. La capacité de charge de la région est estimée entre 8 et 13 ha par UBT.

Zone pastorale / zone côtière et sud-ouest : altitude généralement inférieure à 500 m, pluviométrie qui ne dépasse pas 300 mm/an. Les animaux y sont à l'origine de plus de 90% du revenu des éleveurs. L'agriculture y est très peu développée, et elle est pratiquée uniquement à proximité des fleuves ou points d'eau. C'est la seule zone où l'on trouve des pasteurs purs. La capacité de charge de la région est estimée entre 13 et 20 ha par UBT.

Les trois dernières zones forment le « **Complexo da ordenha** » ou Complexe de la traite.



Agro pastoral zones in grey and pastoral areas in yellow

Villages and towns gazetteer

One can implement a list of Villages, city or towns with their names into LIMS, since some screens use such details (e.g. Module 10 or modules on infrastructures M6). Among the possible sources⁴, an official village's gazetteer can therefore be implemented as a set of parameters of LIMS. One of the problem of implementing a **full Gazetteer** into LIMS is that the implementation of a long list is not always necessary and will render LIMS a bit “heavy” and slow when it comes to accessing such a listing (by a scroll down feature in the software).

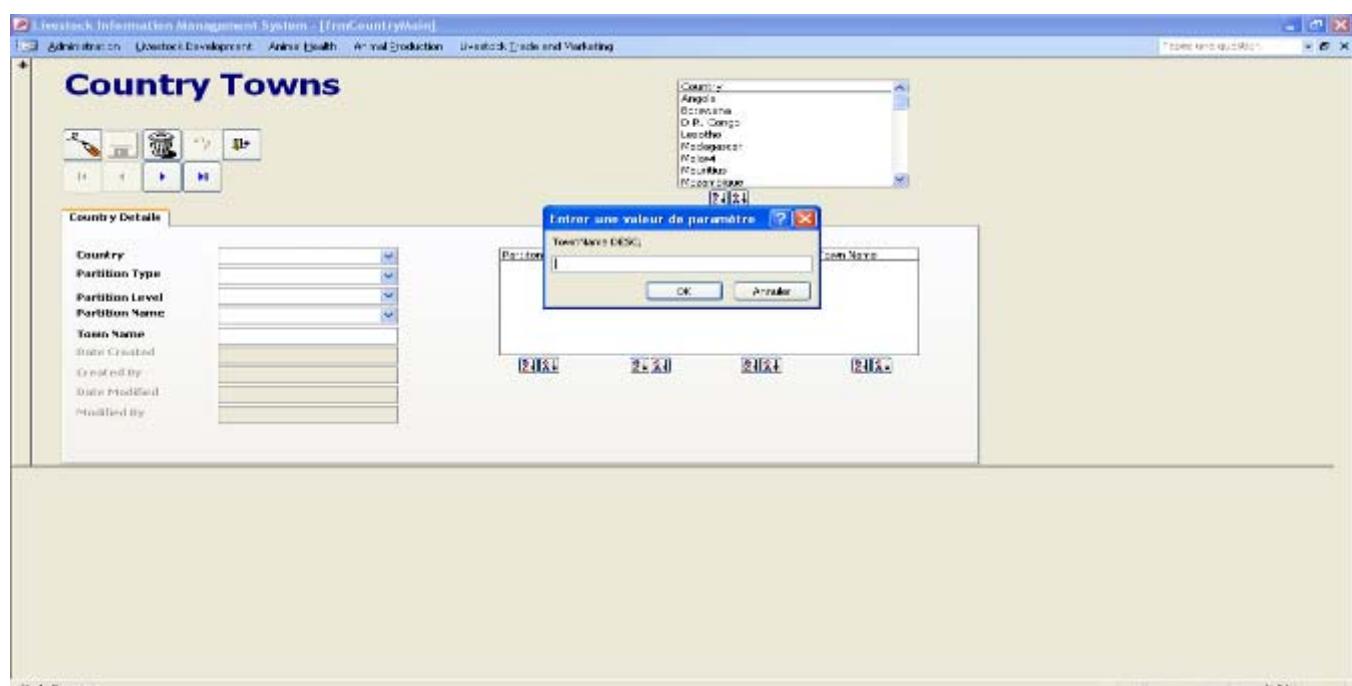
As a matter of facts only a few items (a few names from the list) will be finally used (e.g. use of only towns where Livestock infrastructures do exist). This remark is important to consider before

⁴ DEVinfo is not providing any reference for such objects as all DEVinfo indicators are zonal statistics.

we implement such a listing into LIMS. Moreover a selection of important cities must be done by trimming official list before implementing it.

A simple list of towns of Angola (source Wikipedia) with their old colonial toponyms

- [Amboim](#) (Porto Amboim)
- [Bailundo](#) (Vila Teixeira da Silva)
- [Benguela](#) (São Felipe de Benguella) - port - [railhead](#)
- [Caála](#) (Vila Robert Williams)
- [Calandula](#) (Duque de Bragança)
- [Camacupa](#) (Vila General Machado)
- [Chibia](#) (Vila João de Almeida)
- [Ganda](#) (Vila Mariano Machado)
- [Huambo](#) (Nova Lisboa) - rail
- [Kuito](#) (Silva Porto)
- [Kuvango](#) (Vila da Ponte)
- [Lubango](#) (Sá da Bandeira)
- [Luena](#) (Vila Luso)
- [Massango](#) (Forte Repúblıca)
- [Mbanza Congo](#) (São Salvador do Congo)
- [Menongue](#) (Serpa Pinto) - [railhead](#)
- [Namibe](#) (Moçamedes) - port - [railhead](#)
- [N'Dalatando](#) (Vila Salazar) - rail
- [N'Giva](#) (Vila Pereira d'Eça)
- [Saurimo](#) (Vila Henrique de Carvalho)
- [Soyo](#) (Santo António do Zaire)
- [Sumbe](#) (Novo Redondo)
- [Tombua](#) (Porto Alexandre)
- [Uíje](#) (Carmona)



Any city or town' list can be implemented into LIMS thanks to this screen, before becoming available in any screen (by a scroll down menu item) when requiring access to a town name.

In conclusion of this chapter, we therefore recommend that a person be in charge of monitoring any change in the national partitions lists (ADMIN1 and 2) and then be updating LIMS with information communicated to SADC.

The following paragraphs will show how the components of LIMS already match some of the available LS data in Angola

Components, Modules and Templates looked at during the training

Components have **modules** with reporting **templates** (in Excel all reproduced into the application in MS Access© into screens) which pertain to modules. Therefore there are three levels for categorizing and coding the contents Component Ci Module Mj Template Tk, example C1M1T1. The full list of modules and templates are in the last annexe IX

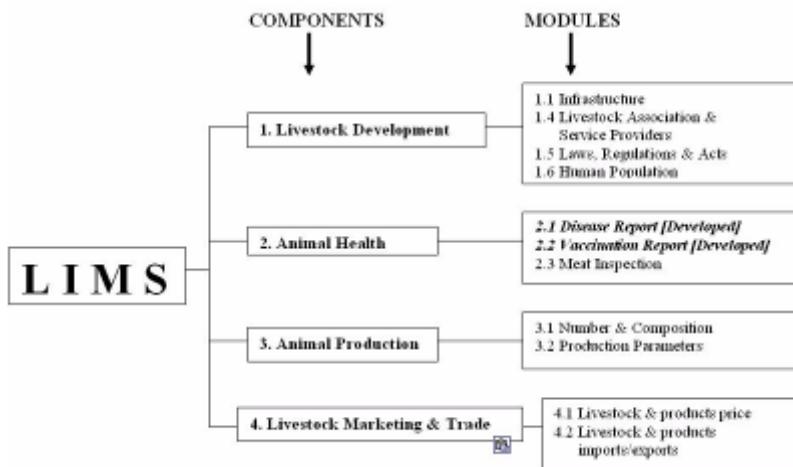


Diagram: the four components of LIMS on which future trainers have been trained (in addition to the administrative module and other functionalities of LIMS).



According to the LIMS there are 11 modules to be shared

LIMS Full « Information system »

- **Reports = Modular Harmonized templates** to collect data for SADC MS and SADC secretariat
 - Excel spreadsheets/ hard copy forms
 - Derived questionnaires (In MS)
 - Three languages / spatial temporal scales
 - **Derived forms (DPT)**
- **Application LIMS (software)** to facilitate exchange of information and interconnectivity with other systems
 - MS Access
 - Interoperable / Import Export / Transfer
- **LIMS task forces = Networks** to run system (People)
 - LIMS national coalition / teams
 - organized, supported & trained
 - Regional networks
- **Procedures, MoU, SoP's** to run LIMS system
 - national / regional
- **Portal WEB** to access AIMS & LIMS information
 - Dynamic cartography and WEB20 networking tools
 - Information posted: yearbook, atlas, brochures, News etc..



PI

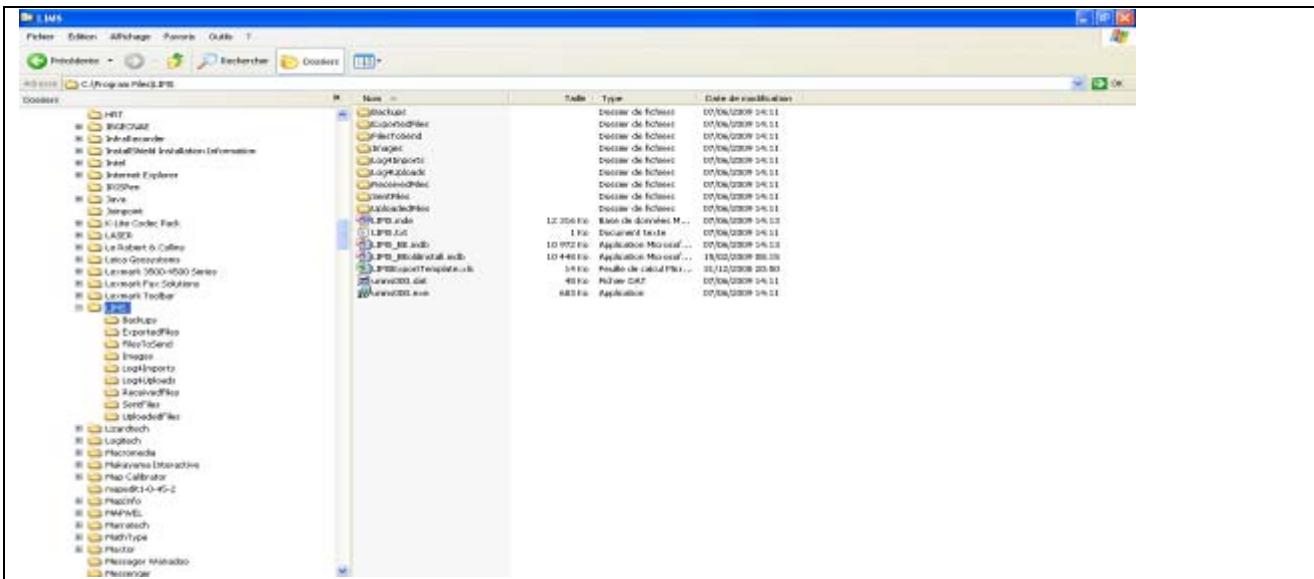
LIMS is a Full information system

The **Training of Trainers** is meant primarily to enable national experts to operate LIMS and that they can conduct similar training sessions at national level at a later stage (multiplier effect), for livestock information officers at provincial, regional and district levels. The replication of training sessions at national level is a prerequisite for the roll-out of LIMS in the country.

The LIMS training had two major components. These are the training on the LIMS template and the training on the operation and use of the LIMS application.

- a) **Training on the LIMS templates** – Before embarking on data entry to the database, trainees need to know the data collection forms or templates. The knowledge of what type of data is collected, how often and the right columns where these should be entered are crucial for better understanding of the database at a later stage. Hence, all the 11 modules templates were described to the trainees. Additional information included as footnotes for the selection of parameters where there are multiple choices to pick from were also covered. The trainees were briefed on the Standard Operating Procedure for providing comments and suggestions for further improvement of the templates as well as for daily use when these are introduced to the grass roots from where data is captured on paper copies or MS Excel sheet. The trainees also received both the electronic and hard copy prints of all the templates for the 11 modules of LIMS.
- b) **Training on the LIMS application** – This component of the training focused on the proper operation and use of the LIMS database. Trainees were taken through the installation and configuration of the application, data entry and modification, query building, report generation, export of data for final analysis and procedures for backing up data and transfer data files between different installation. The complete training timetable is attached. During the training

of the three days, most of the 11 modules were covered, first by demonstration followed by exercise using live and in some cases dummy data. All modules were fully covered.



At the end of the three days training, a general discussion was conducted with the participants. The trainees expressed their satisfaction with the LIMS performance, but stressed the need for networking to increase awareness on LIMS. The participants committed themselves to forming a trainer committee and to work out a monitoring and coordination arrangement for LIMS activities.

All the trainees received a CD containing training materials, a copy of the LIMS application and templates, SOP, presentations on LIMS and AIMS, among others (cf annexe).

A full and comprehensive compilation of Livestock statistics (production and import) is available on a regular basis from ISV (Instituto dos servicios veterinarios) and from GEPE (planning). Hereafter we provide some example of LS Stats available for recent years in Excel or Word.

Their reformatting to match Import templates of LIMS will allow direct importing into LIMS tables.

An example of Importing Format in Excel

Example of a standard training sequence: Component Animal Production with two modules and 9 templates (reporting templates)

Template => Screen=> special templates

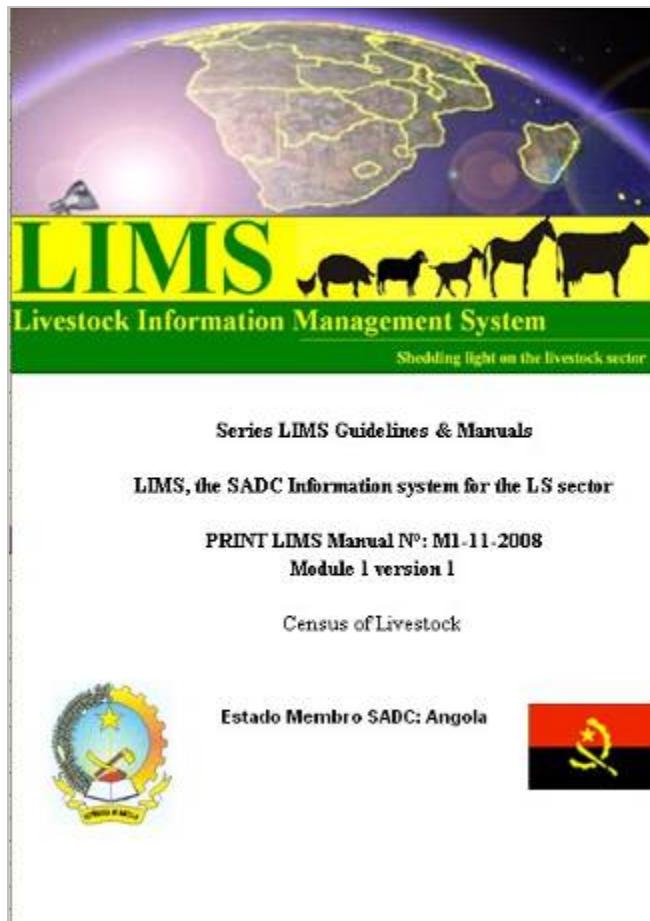
These reporting templates are all reflected into the LIMS application with a similar tabular visual approach.

One census reporting template (by economic function) in Excel

Screen corresponding to the census template by economic function (also attached to the header template in the first screen tab).

We will not display in this report the **entire set of templates and related screens** (provided into the CD delivered at the end of the training). We will **highlight** hereafter **some templates** where data are available and where **comments were made** during the presentation and the training on both the templates and the application (screens). More comments will flow to PRINT thanks to the participants who shall use the **comment sheet** provided during the training.

One can customize front pages of Excel reporting templates (can be changed by MS) to improve national ownership on the system, with national insignias and official logos.



A specific angolese front page for the census reporting template

All **templates** (part of the modules) shall be associated with a **SoP** (see next section). This SoP is actually made of some **Metadata** (source of data etc..) about the report and the statistics. It also has an indication of which **institution** and **person** is dealing with the particular set of statistics (**module or template**) discussed (coordination role). We at SADC recommend the drafting of SoP on the principle of at least "**one SoP per Module**" (or ideally it should be one SoP per template as part of a given module, but in general one institution will be in charge of an entire module).

The two following screens show the Excel version of one Metadata and one SoP as part for one module (here in Portuguese).

Every time a template is filled (equivalent of a data screen in the application) then a **header must be filled** with the given template to indicate e.g. the methodology used to get the data, the source of the data and the person responsible for the module. There are 11 modules, some have quantitative attributes (9/11) and two are non-quantitative (listing). All modules have such a header, which is almost similar in all templates, indicating the frequency of reporting and of submission to SADC, the person responsible and some indication on methodology and source for data submitted to the secretariat.

MO7_AQAP/Mo7/174 n° 002/Comissão/GenIB

	SADC Annual Relatorio Effectivos animais et composição do rebanho nacional				
País:	Ano:	Data do relatório:			
Pessoa criadora do Relatório:	Nome:	Nome profissional:	Posição:		
Telefone fixo/terio:	Outro telefone:	Celular:			
Fax:	E-mail 1:	E-mail 2:			
Fonte de dados principal usada para escrever este relatório (descrever)					
Fonte de Dados:	Fonte de dados principal usada para escrever este relatório (descrever)				
Metodologia usada para escrever este relatório (X ou descrever)					
Metodologia:	Censo	Inquérito com amostragem	Modelado	Estimado	Outra - especificar
Comentários:					

The Metadata Header in the Excel template

Metadata

Modulo 1 coordenador: Tabelas	Processo Standardizado por of manejo / a administração do sistema Procedimento / Processo de Operações Estandardizadas (Procedimentos de Boas Práticas)	Modificação que foi feita: por quem ? Quando data e versão?
Tab 1: Nr por espécie Delegado a: Nome: Email:	relatório escritor	
Tab 2: Nr por função económica Delegado a: Nome: Email:	relatório escritor	
Tab 3: Nr. Porraga Delegado a: Nome: Email:	relatório escritor	
Tab 4: Nr. Por idade e sexo Delegado a: Nome: Email:	relatório escritor	

The SoP Header in the Excel template

The SoP worksheet embeded into the LIMS Excel files (there is also a word version for a comprehensive SoP, with an indication of the process to follow to build SoP thanks to LIMS national networks, cf. Annexe)

We will not display in this report the **entire set of templates and related screens** (provided into the CD delivered at the end of the training). We **highlight some templates** where **comments were made** during the presentation and the training on both the templates and the application (screens). More comments will flow to PRINT thanks to the participants who shall use the **comment sheet** provided during the training. The templates of the 11 Modules are also available translated in portuguese in the **electronic annex** (CD).

The following comments were made at the stage of the training

Corrections and improvements suggested during LIMS Training

In Module 1, the economic functions for the bovine species, the term work is broader encompassing traction, transport and others. Hence, it is suggested to use Work (Trabalho) instead of Draft and Work or Draft and Transport.

The term Poultry should be clearly defined as it includes other birds such as ducks, guinea fowl, etc. In LIMS in some places, this term is used as synonymous with chicken.

Similarly, the term crossbreed (under Number per Breed) needs to be clearly defined whether it refers to the cross between exotic and local breeds or includes the cross between different breeds irrespective of whether these are indigenous or exotic.

In Module 1, more specifically in the herd structure tab page, some modifications were made. The word “castrated” is removed from Ox and the words “macho and femme” were removed from Bezerro and Bezerra respectively.

There was a long discussion on the different categories of herd composition for cattle. Some argued that the Vitelo/Vitela category is for dairy cattle while Novilho/Novilha was for beef cattle. However, the majority argued that the difference is not an economic function but the age of the animals. It seems there was a consensus that Bezerro/Bezerra is for calves from birth to 6 months of age, Vitelo/Vitela is for weaned animals and finally Novilho/Novilha stands for Steers and Heifers. As there is no separate category for weaned animals Vitelo and Novilho should be combined for now.

There were few changes in the flock composition labels for sheep and goat (the Portuguese translation)

In Module 2, the Portuguese labels corresponding to “HH headed by men or women” has been corrected to read ... chefiado por homem or chefiado por mulher

In Module 3, under eggs produced, the word Frango, which stands for male birds destined for meat production (broiler), should be changed to Galinha.

Here, the unit of measure of tray of 30 eggs is proposed in addition to the existing onces.

A clarification is needed to differentiate Carne de caça, (meat from hunted animals) from meat produced as a result of game farming.

The category of feather now available in LIMS is from chicken and ostrich. Another category of feather from other birds (ducks, guinea fowls, etc.) should be added.

The value (price) of live animals in Module 4 (Livestock Marketing) is given in Kg. However, there are countries collecting these data in terms of the entire animal (not per Kg). Hence, a facility of choosing the entry either per Kg or the entire animals should be there.

In Module 4, the label Nominal Price in Portuguese is wrong. It reads “in Dollars” instead of nominal price.

In the same module, the labels for “eggs” tab page require editions. Frango should be changed to Galinha and the cattle producers’ price changed to poultry farmers’ (Avicultor) price or just farmers price.

One of the major corrections needed in LIMS is the Administrative set-up or the list of districts. The majority, according to the trainees, were based on the colonial time nomenclature, which ever since has changed. A Separate list will be compiled on this (cf. validation of partitions part).

Liste des Modules et écrans (rapports types Excel) correspondants au système LIMS / *Lista dos Modulos e ecrã (relatorios tipo Excel) do LIMS / List of Modules and screens (SADC Harmonized templates) of LIMS*

- Headers / Timbre / Entête

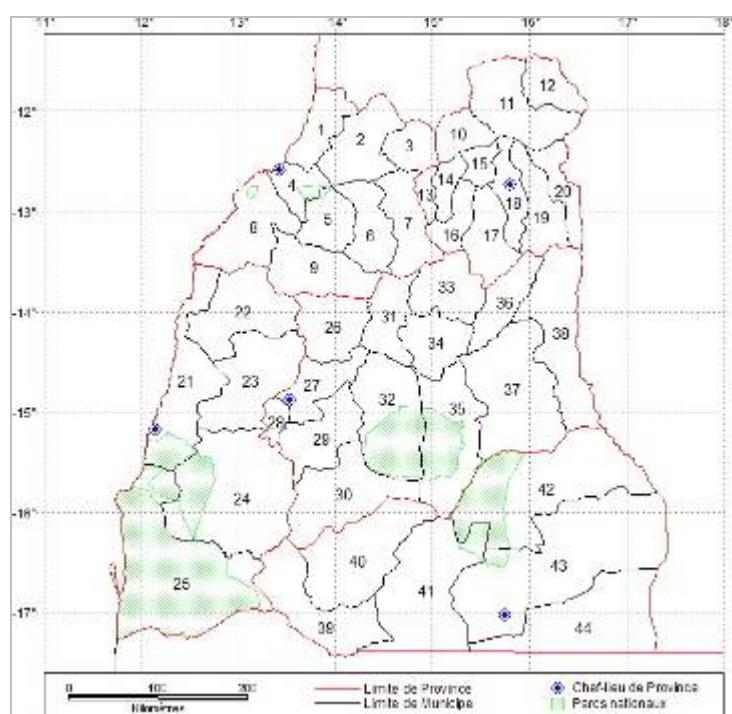
(Cf. supra)

- Module 1 *Numbers & Composition of Herds* / Effectivos animais do rebanho nacional / Effectifs nationaux – recensement animal
 - 1. *Nr by species* / effectivos animais por espécies / Nombre par espèce
 - 2. *Nr by economics* / effectivos animais por função económica / Nombre par fonction économique
 - 3. *Nr by breeds* / Effectivos animais por raça / Nombre par race
 - 4. *Nr by herd structure* / Effectivos animais por idade e sexo / Nombre par âge et sexe (démographie)

1. Livestock numbers - by species Effectivos pecuarios / por espécie												
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Bovinos	Ovinos	Caprinos	Suínos	Cavalos	Asinos/Burros	Aves	Outro1**	Outro2**	Outro3**
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
	etc											

* Specify Administrative or Technical boundaries (admin or techn)
 ** Specify the species
 especificar espécie

A few statistics and explanations provided here after are taken from a regional development project in Angola (zone as shown here).



A Study area for the development of Livestock in Angola (main document is in french).

Estimates of Census in Angola in 1996 / Estimations de l'effectif animal en Angola (source UN study)

Provinces	Superficie km ²	Population ^a Estimations 1996	Bovins ^b	Petits ^b Ruminants	Suidés ^b	Poulets ^b Pondeuses	Equidés ^b
Lunda norte	102 783	320 000	2 300	42 000	34 500	180 000	47
Lunda Sul	45 649	165 000	3 450	46 000	34 500	190 000	78
Cabinda	7 270	199 000	4 370	9 700	7 700	500 000	22
Zaire	40 130	262 000	805	130 500	1 200	980 000	15
Uige	58 698	985 000	1 955	173 300	89 000	1 220 000	30
Bengo	31 371	190 000	8 740	220 300	4 200	900 000	95
Luanda	2 418	2 022 000	9 200	32 000	7 100	5 000 000	380
Kwanza Norte	24 190	440 000	2 300	109 600	99 580	500 000	30
Malange	97 602	1 020 000	1 725	190 300	150 400	700 000	125
Kwanza Sul	55 660	710 000	115 000	236 506	197 200	1 000 000	1 500
Bié	70 314	1 280 000	46 000	163 000	245 600	1 220 000	135
Moxico	223 023	360 000	37 950	51 350	30 000	46 000	1 302
C Cubango	199 049	139 000	295 550	445 180	157 500	250 000	4 650
Benguela	31 788	718 000	310 780	228 000	332 400	1 500 000	200
Huambo	34 274	1 730 000	57 500	444 900	597 000	200 000	750
Huila	75 002	954 000	1 380 000	848 800	246 100	1 200 000	3 000
Namibe	58 137	154 000	402 500	538 600	67 300	105 000	3 360
Cunene	89 342	255 000	1 345 000	746 000	246 100	300 000	8 700
TOTAL	1 246 700	11 903 000	4 025 125	4 656 036	2 547 380	15 991 000	24 419

a Source "Atlante De Agostini - 2004. Istituto geografico De Agostini, Novara"

b Source "Estimation MINADER 2005"

Relative importance of LS species and sex ratio in Angola in some province / Importance relative du cheptel.

« Les seules données trouvées sur la composition du troupeau dans la zone pastorale sont assez vieilles⁵, mais elles montrent une exploitation rationnelle des potentialités des animaux. Les femelles adultes représentent environ 50 % du troupeau, les animaux immatures 42 % (23 % ♀ et 19 % ♂), les taureaux 2 %, le reste (autres mâles adultes non reproducteurs) 6 %. Dans ce cas, on retrouve un rapport de 25 vaches pour un taureau. »

	Superficie km ²	Population ^a Estimations 1996	Bovins ^b	Petits ^b Ruminants	Suidés ^b	Poulets ^b Pondeuses	Equidés ^b
Zone d'étude	288 543	3 811 000	3 495 780	2 806 300	1 488 900	3 305 000	16 010
% sur Angola	23,1	32,0	86,9	60,3	58,5	20,7	65,6
Reste Angola	958 157	8 092 000	529 345	1 849 736	1 058 480	12 686 000	8 409

⁵ Recenseamento Agrícola de Angola, MIAA, 1970.

% sur Angola	76,9	68,0	13,2	39,7	41,6	79,3	34,4
--------------	------	------	------	------	------	------	------

Nous n'avons pas de données récentes sur les effectifs animaux dans la zone, le dernier recensement datant des années '70. Les données reportées dans le tableau 1, nous ont été fournies par le MINADER et ont été estimées d'après les campagnes de vaccination.

Huila : Poultry housing / Poulailler (source FAO study)



2. Livestock numbers - by economic function													
Effectivos pecuarios / por função económica			Bovinos					Ovinos			Caprinos		
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Leite	Carne	Duplo Propósito	Tracção ou carga	Outro**	carneiro	Lã	Industria de Peles (Karakul)	carne	leite	Lã Mohair
.....	Reg/prov 1.....	Dist 1.....											
		Dist 2.....											
		Dist 3.....											
.....	Reg/prov 2.....	Dist 1.....											
		Dist 2.....											
		Dist 3.....											
etc													

* Specify Administrative or Technical boundaries (admin or techn)
** Specify type
especificar tipo / divisão

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Suinos				Aves				Local
			Carne de Porco	Produtor de Bacon	Criação	Local	Poedeira	Frangos	Duplo Propósito	Reprodutores	
.....	Reg/prov 1.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
.....	Reg/prov 2.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
etc											

Animal traction /traction animale.



Zorra.



Huambo. Field labour.

3. Livestock numbers - by breed

Effectivos pecuários / por raça

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Bovinos			Ovinos			Caprinos		
			Autoctono	Exotico	Cruzado	Autoctono	Exotico	Cruzado	Autoctono	Exotico	Cruzado
.....	Reg/prov 1.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
.....	Reg/prov 2.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
	etc										

* Specify Administrative or Technical boundaries (admin or techn)

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Suínos			Aves			Outros**.....		
			Autoctono	Exotico	Cruzado	Autoctono	Exotico	Cruzado	Autoctono	Exotico	Cruzado
.....	Reg/prov 1.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
.....	Reg/prov 2.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
	etc										

** Specify breed

4.1. Cattle herd structure

Effectivos pecuários / por idade e sexo

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Castrado (Boi)	Vacas	Touros	Novilho	Novilha	Bezerro macho	Bezerra femea			
										Carneiro*	Ovelha	animais jovens
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
	etc											

* Specify Administrative or Technical boundaries (admin or techn)

4.2. Sheep and goat flock structure

Effectivos pecuários / por idade e sexo

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Ovinos			Caprinos		
			Carneiro*	Ovelha	animais jovens	Bode*	Cabra	animais jovens
.....	Reg/prov 1.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
.....	Reg/prov 2.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
	etc							

* Rams and Bucks (or males): these numbers include castrates

4.3. Pig herd structure							
Effectivos pecuários / por idade e sexo							
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Provincia	Divisão ao nível 2, e.g. Distrito	Barrasco	Porca	Leitão desmamado	Leitão femea desmamada	animais jovens em crescimento
.....	Reg/prov 1.....	Dist 1..... Dist 2..... Dist 3.....					
	Reg/prov 2.....	Dist 1..... Dist 2..... Dist 3.....					
	etc						

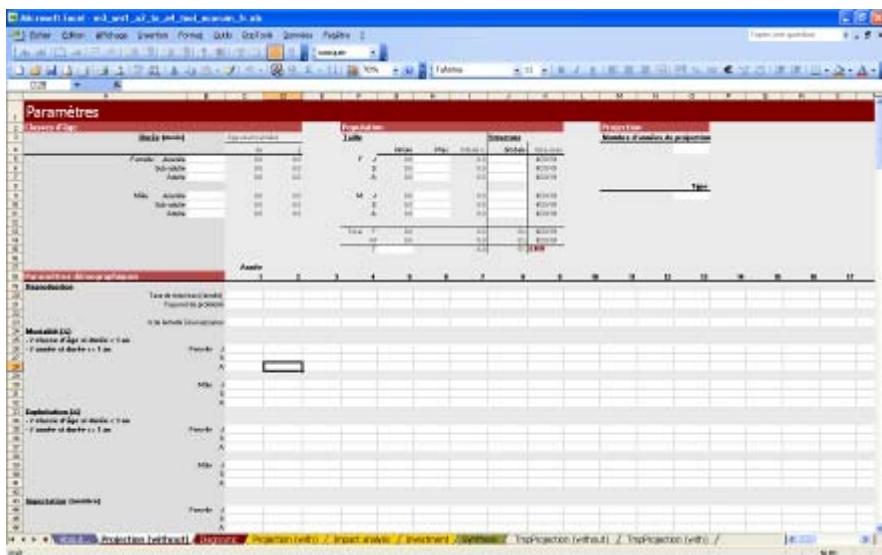
macho reprodutor
femea reprodutora

The only constraint implemented into the software for the census module M1 is that for one source mentioned, the breakdown of figures into the selected templates (if some or all are filled) should tally (e.g. a breakdown by specie and a break down by age & sex should tally if originating from the same source and methodology).

Definition of the categories when countries differ in their modus operandi: although we try to impose a nomenclature with well defined categories, for the template on economic functions, there is some flexibility accepted some countries will fill it encompassing young animals whereas some will exclude them. Such information should be indicated in the manual and as a comment in the LIMS (memo box in the application). Another alternative shall be to impose only one single definition of the economic categories for instance excluding young animals.

Potential Link to demographic modelling tools in the Angolan context of restocking:

The data on census template number 4 (C1M1T4, by age and sex) allows for some demographic modelling. Some indication on how to use modelling tools will be provided in 2009, thanks to a PRINT consultancy c/o CIRAD. A tool like DynMOD⁶, as part of the ECORUM toolkit developed by CIRAD for the World Bank Alive initiative, can be inputted with similar LIMS data and could provide the basis for economic and demographic modelling.

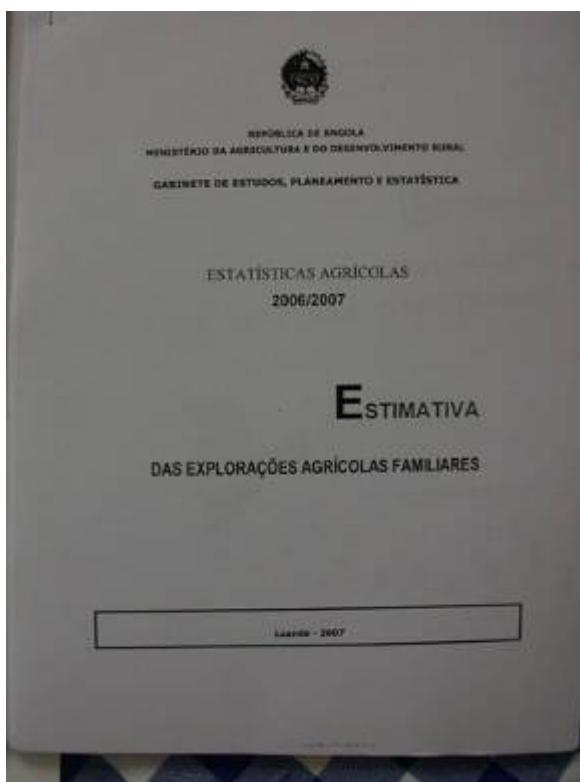


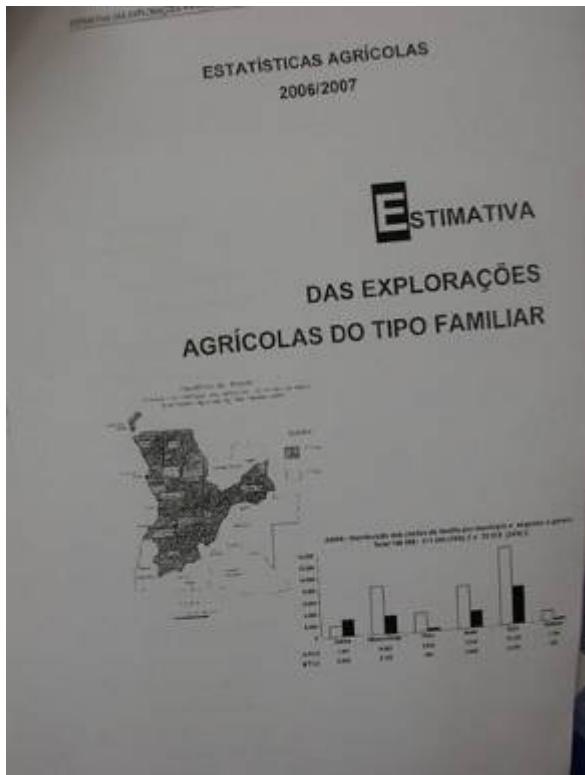
DynRUM modelling tool

⁶ Developed by CIRAD under a World bank contract of the ALIVE initiative

- Module 2 *Human Households & Population in Livestock farming / Agregados familiares criadores / Ménage engagés dans l'agriculture et l'élevage*
 - 1. *Human Population / Agregados familiares / Ménages et population humaine*

Such data is also available in few recent publications of GEPE MINAGRI (cf inqueritos 2006).





ESTIMATIVA
DAS EXPLORAÇÕES AGRÍCOLAS DO TIPO FAMILIAR

Índice	Página
I Quadro Conceptual	12
II Metodologia	13
II.1 Amostragem	14
II.2 Recursos Humanos envolvidos	14
II.3 Abrangência Geográfica	15
III Apresentação e Análise de Dados	17
III.1 Província de Cabinda	19
III.2 Província da Zaire	19
III.3 Província do Uige	21
III.4 Província de Bengo	24
III.5 Província da Lunda Sul	27
III.6 Província da Lunda Norte	28
III.7 Província de Malanje	32
III.8 Província de Luanda	36
III.9 Província da Lunda Sul	37
III.10 Província da Huíla	39
III.11 Província da Benguela	42
III.12 Província da Huíla	43
III.13 Província de Kwanza Sul	44
III.14 Província de Malanje	47
III.15 Província de Namibe	49
III.16 Província de Cuanza Norte	50
III.17 Província da Kwanza Norte	51

1. Human Population Farming Livestock população humana / agregados familiares														
Divisão Tipo*	Divisão ao nível 1, Região/Província	Divisão ao nível 2, e.g., Distrito	Por divisão selecionada			Total Famílias envolvidas em Agricultura			Total Famílias em Criação de Gados			Total Famílias Rurais em Criação de Gado		
			População Total	Agregados governados pelo Homem	Agregados governados pela Mulher	Agregados Total	Agregados governados pelo Homem	Agregados governados pela Mulher	Total	Agregados governados pelo Homem	Agregados governados pela Mulher	Total	Agregados governados pelo Homem	Agregados governados pela Mulher
.....	Reg/prov 1.....	Dist 1.....												
		Dist 2.....												
		Dist 3.....												
.....	Reg/prov 2.....	Dist 1.....												
		Dist 2.....												
		Dist 3.....												
etc														

* Specify Administrative or Technical boundaries (admin or techn)
** Agriculture defined as crop and livestock farming
*** This figure includes all livestock farmers irrespectively of where they farm (i.e. rural, peri-urban or urban)

Human Population

Report Header - Human Population

Population Type:	Administrative	Administrative	Administrative
Population Level:	Administrative	Administrative	Administrative
Population Name:	Nome	Nome	Nome
Total Population:	2196	1900	1900
Males:	1098	950	950
Females:	1098	950	950
Total Households in Livestock:	266	266	266
Males:	133	133	133
Females:	133	133	133

Report Footer - Human Population

- Module 3 *Production Parameters* / Produção animal / Production animale
 - 1.Slaughter / Abate (carne) / Abattages
 - 2.Milk / Leite / Lait
 - 3.Dairy products / Lacticinios / Produits laitiers
 - 4.Eggs / Ovos / Oeufs

- 5.Hides, skins / Curos e Peles / Cuirs et peaux

This is the “morceau de choix” of LIMS, meaning its main part as it requires a major collaboration between the private and the public sector. In the absence of a meat board or dairy board in Angola, the provision of statistic relies on the presence of inspectors in various premises processing meat or milk. The research could play a significant role too.

For the Template number 1: Meat inspectors in abattoirs should be able to provide the necessary data.

1. Number of Animals Slaughtered and Meat Produced in Kg

numero de animais abatidos e carne produzida

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Espécies	matadouro industrial		matadouro local e casa de matança	
				numero de abate (unidade)	carne produzida (kg)	numero de abate	carne produzida (kg)
.....	Reg/prov 1.....	Dist 1.....	Bovinos				
			Ovinos				
			Caprinos				
			Suinos				
			Avestruz				
			Avestruz				
			Outras Aves**				
			Coelho				
			Game***				
			Crocodilo				
			Outros***				
		Dist 2.....	Bovinos				
			Ovinos				
			Caprinos				
			Suinos				
			Avestruz				
			Avestruz				
			Outras Aves**				
			Coelho				
			Game***				
			Crocodilo				
			Outros***				
etc		Dist 3.....	Cattle				

* Specify Administrative or Technical boundaries (admin or techn)

** Other poultry may include ducks, turkeys, guinea fowl, geese, etc.

*** The game species should be specified. Example include impala, kudu, eland, etc.

**** Specify any important species not included in the list above

2. Milk Production by Species (in litres)

leite produzido

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Leite de vaca produzido (litr)			Leite de cabra produzido (litr)			Leite produzido por outras espécies (litr)		
			Total**	Processado	Não processado	Total**	Processado	Não processado	Total**	Processado	Não processado
.....	Reg/prov 1.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
.....	Reg/prov 2.....	Dist 1.....									
		Dist 2.....									
		Dist 3.....									
etc											

* Specify Administrative or Technical boundaries (admin or techn)

** Total milk produced includes raw milk collected and uncollected

*** Specify species

3.1. Processed Dairy Products from Cattle

Produtos leiteiros (lacticinios)

Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	Iogurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em Po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
	etc											

* Specify Administrative or Technical boundaries (admin or techn)

** Specify which product

3.2. Processed Dairy Products from Goats

Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	Iogurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
	etc											

4. Quantity of Eggs Produced (enter by pieces or dozen)

Ovos produzidos

Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2, e.g. Distrito	Galinha (ovo de)	Unidade de medida**	Outros ovos***	Unidade de medida
.....	Reg/prov 1.....	Dist 1.....				
		Dist 2.....				
		Dist 3.....				
.....	Reg/prov 2.....	Dist 1.....				
		Dist 2.....				
		Dist 3.....				
	etc					

* Specify Administrative or Technical boundaries (admin or techn)

** Specify, enter by pieces or dozens (one dozen is 12 pieces)

*** Other eggs, please specify species

tray

unidade / duzia

5. Number of Hides, Skins and Pelts (in units) and Fibers and Feathers (in kg) Produced

curos peles fibras plumas produzidos

Divisão Tipo*	Divisão ao nível 1, Região/Província	Divisão ao nível Distrito	Bovinos couros	Game** peles	Ovinos peles	Caprinos peles	Avestruz couros	Crocodilo peles	Game** peles	Karakul Peles	Lâ*** (kg)	Lâ Mohair*** (kg)	Avestruz Plumagens (kg)	Aves Plumas (kg)
.....	Reg/prov 1.....	Dist 1.....												
		Dist 2.....												
		Dist 3.....												
.....	Reg/prov 2.....	Dist 1.....												
		Dist 2.....												
		Dist 3.....												
	etc													

* Specify Administrative or Technical boundaries (admin or techn)

** Specify

*** = Net mass before primary processing (net clean)

Fibras animais / plumas

- Module 4 *Livestock & Products Price* / Preços dos productos animais / Prix des produits d'élevage et animaux vivants
 - 1. *Live animals* / Animal vivo / Animaux vivants
 - 2. *Meat products* / Producto de carne / Produits carnés
 - 3. *Milk products* / Leite e Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides & skins* / Curos e Peles / Cuirs et peaux
 - 6. *Fiber & feathers* / Fibras e plumas / Fibres animales et plumes

1. Average Prices of Live Animals per Species, Type of Animal, Type of Market (or Infrastructure) and Type of Price Preço animais vivos por especies, tipo, mercado							
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Especies (1)	Tipo de animal	Type de Mercado (2) (de Infra-estrutura)	Tipo de preço (3)	Preço por animal moeda local
.....	Reg/prov 1.....	Dist 1.....	Bovinos	Premio/Exportação			
			Bovinos	carcaça pesada			
			Bovinos	carcaça leve			
			Bovinos	Vaca reprodução			
			Ovinos	carcaça pesada			
			Ovinos	carcaça leve			
			Ovinos	Ovelha reprodução			
			Caprinos	carcaça pesada			
			Caprinos	carcaça leve			
			Caprinos	Cabra reprodução			
			Porcos	Produtor de Bacon			
			Porcos	Carne de Porco			
			Porcos	Porca reprodução			
			Galinhais	Frango			
			Galinhais	Pinto do dia			
			Galinhais	Frango local			
etc		Dist 2.....	Bovinos	Premio/Exportação			

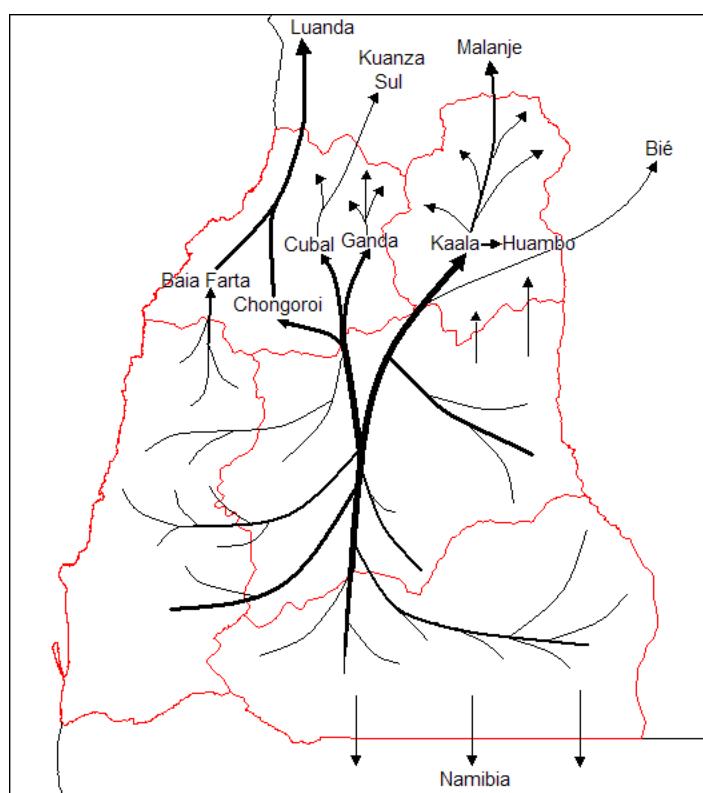
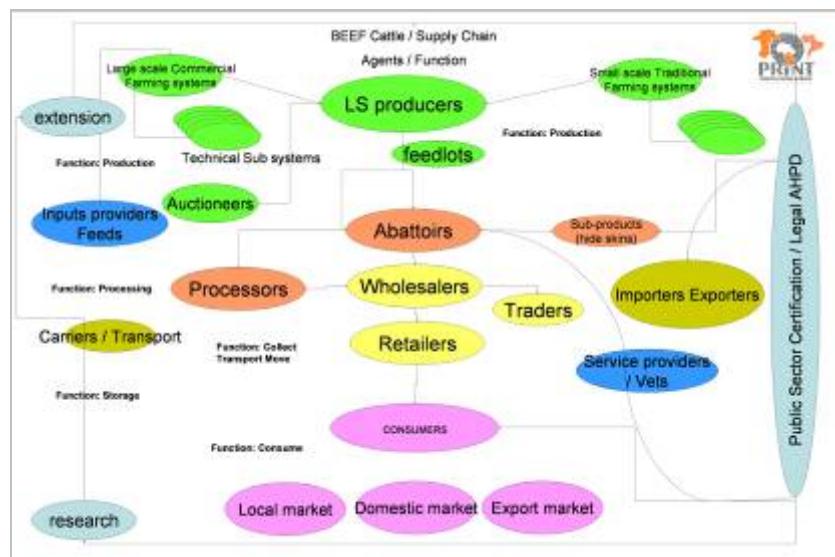
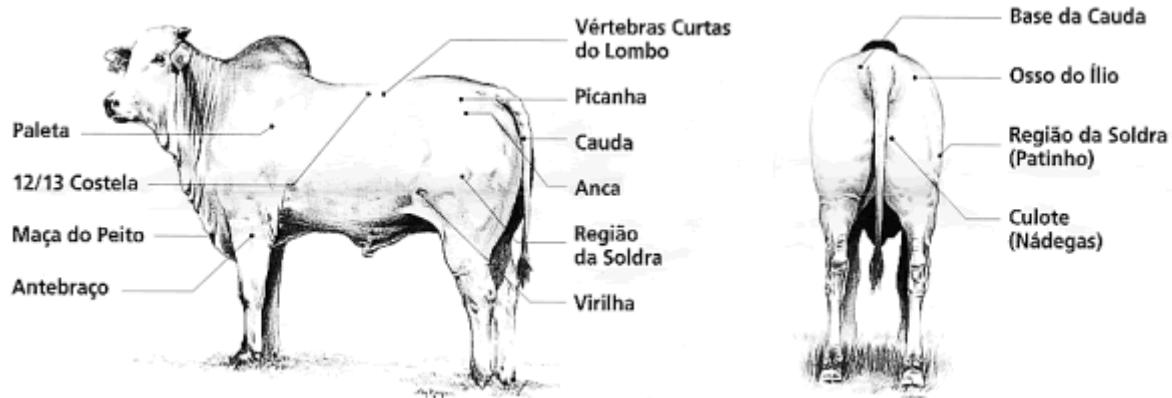
In LIMS the rationale of the prices module follows the natural course of a commodity chain.
No Modulo 4 se usam “preços de mercado” para corte de carne ou outros productos da pecuaria.

One can refer to the following publication to understand the rationale of the commodity chain:
 cadeia de produção:

Publicação de metodologia geral sobre a análise de sistema de produção: Utilização da análise de sistema de produção para a análise econômica de políticas, DOCUMENTOS DE FORMAÇÃO PARA A PLANIFICAÇÃO AGRÍCOLA; Por Pierre Fabre , Serviço da formação, Divisão da análise de políticas, FAO

Before reaching abattoirs cattle are firstly gathered and led to major market places.





Informal cattle flows for domestic marketing of livestock on the hoof in Angola / Flux informels de commercialisation des bovins.

2. Average Prices of Meat Products per Kg, per Outlet and Type of Price

preço medio dos productos de carne

Divisão Tipo*	Divisão ao nível 1 Região/Província	Divisão ao nível 2 Distrito	Espécies (1)	Categoría de productos de carne	Tipo de retalhe (1)	Tipo de preço (2)	Preço por kg moeda local
.....	Reg/prov 1	Dist 1	Bovinos	carcaça inteira			
			Bovinos	Meia Carcaça			
			Bovinos	quarto dianteiro			
			Bovinos	quarto traseiro			
			Bovinos	Peito			
			Bovinos	Rump / garupa			
			Ovinos	carcaça inteira			
			Ovinos	Meia Carcaça			
			Ovinos	quarto dianteiro			
			Ovinos	quarto traseiro			
			Ovinos	Perna			
			Ovinos	Costela			
			Caprinos	carcaça inteira			
			Caprinos	Meia Carcaça			
			Caprinos	quarto dianteiro			
			Caprinos	quarto traseiro			
			Caprinos	Perna			
			Caprinos	Costela			
			suínos	carcaça inteira			
			suínos	Meia Carcaça			
			suínos	quarto dianteiro			
			suínos	quarto traseiro			
			suínos	Shank			
			suínos	Costela			
			Galinha	Frango (carcaça inteira)			
			Galinha	Frango local (carcaça inteira)			
etc	Dist 2	Bovinos		Game**	Carne de Game **		

Cunene. Local marketing of meat / Vente de viande au marché de Cahama



3. Average Prices of Milk and Dairy Products (in litres)
preço medio dos lacticínios e leite

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Categoria de leite e de lacticínios (de vaca)	Tipo de retalho (1)	Tipo de preço (2)	Preço moeda local
.....	Reg/prov 1.....	Dist 1.....	Naõ processado			
			Leite Pasteurizado			
			Leite UHT Ultra pasteurizado			
			Leite Fermentado			
			Iogurte			
	etc	Dist 2.....	Naõ processado			

4. Average Prices of Eggs

preço medio dos ovos

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Unidade de Medida**	Ovo de Galinha - Preço moeda local	
				Preço Produtor	Preço Retalho
.....	Reg/prov 1.....	Dist 1.....	unidade		
			duzia		
		Dist 2.....	unidade		
			duzia		
		Dist 3.....	unidade		
			duzia		
.....	Reg/prov 2.....	Dist 1.....			
	etc				

Le prix d'un litre de lait frais ou caillé varie entre 75-100 Kz ($\pm 0,7-1,2 \$$). Le reste du lait commercialisé est du lait importé à longue conservation, vendu entre 180-250 Kz ($\pm 2,2-3 \$$) le litre et, surtout, du lait en poudre, vendu environ 1600 Kz ($\pm 19,5 \$$) les 500g.

5. Average Wholesale Purchase Prices of Hides, Skins and Pelts per Unit (a hide or a skin)
preço medio dos curos peles plumas

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Courores Bovinos		Courores Game**	
			Colector	Curtimento	Colector	Curtimento
.....	Reg/prov 1.....	Dist 1.....				
		Dist 2.....				
		Dist 3.....				
.....	Reg/prov 2.....	Dist 1.....				
	etc					

* Specify Administrative or Technical boundaries (admin or techn)

** Specify which game species

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Courores Ovinos		Courores Caprinos		Courores Avestruz		Courores Crocodilos		Courores Game**		Karakul peles
			Colector	Curtimento	Colector	Curtimento	Colector	Curtimento	Colector	Curtimento	Colector	Curtimento	Colector
.....	Reg/prov 1.....	Dist 1.....											
		Dist 2.....											
		Dist 3.....											
.....	Reg/prov 2.....	Dist 1.....											
	etc												

Dans tous les marchés, on peut acheter des œufs provenant des élevages familiaux environnants.

Dans les villes, les prix sont généralement autour de 15-20 Kz/œuf ($\pm 0,18-0,24 \$$). Dans les marchés ruraux, ils sont de l'ordre de 10 Kz/œuf ($\pm 0,12 \$$). Dans les principaux marchés, on trouve également des œufs importés, plus gros et avec un prix plus élevé que ceux produits localement, environ 20-25 Kz/œuf ($\pm 0,24-0,3 \$$).

6) Average Wholesale Purchase Prices of Fibre (Wool and Mohair) and Feathers per Kg
 preço medio Fibras animais e plumas

Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Lã (preço/kg)	Lã Mohair (preço/kg)	Avestruz Plumagens (preço/kg)	Galinhas Plumas (preço/kg)
.....	Reg/prov 1.....	Dist 1.....				
		Dist 2.....				
		Dist 3.....				
.....	Reg/prov 2.....	Dist 1.....				
	etc					

* Specify Administrative or Technical boundaries (admin or techn)

Note 1: Purchases are generally at auctions

In these various price templates, a broad list of product categories has been selected and is implemented in the database. They represent items with a harmonized & shared definition as explained into generic LIMS manuals; therefore this is the core group of product of interest for the LIMS price module. Moreover, one recommends that the manuals include specific comments for the country, as some items must be clearly interpretable in their respective context.

For example, the **grading of meat** (meat carcasses) in SADC is not harmonized, therefore in all country the grading stated as “low weight carcass” (a category implemented into the LIMS in Module 4 on price) must be explained in a specific paragraph of the manual, so that it becomes fully compatible with the national “know how” and modus operandi. This is why once again we recommend that trainers add information in their national training manuals, i.e. in the respective paragraphs. Later SADC will pursue the legal harmonization of grading which is so far not possible, alike it is done in other REC e.g. EU (cf EU classification in next frame).

Regulation (EC) No 1183/2006 [Official Journal L 214, 04.08.2006];

This Regulation concerns the Community classification scale for the carcasses of adult bovine animals.

Regulation (EEC) No 1186/90 [Official Journal L 119, 11.05.1990];

This Regulation extends the scope of the Community scale for the classification of carcases of adult bovine animals.

1. Average Prices of Live Animals per Species, Type of Animal, Type of Market (or Infrastructure) and Type of Price							
Partition Type*	Partition 1, e.g. Region/Province	Partition 2, e.g. District	Species (1)	Type of animal	Type of Market (2) (or infrastructure)	Type of Price (3)	Price per animal in local currency
.....	Reg/prov 1	Dist 1.....	Cattle	Premium/Export			
			Cattle	High weight			
			Cattle	Low weight			
			Cattle	Breeding cow			
			Sheep	High weight			
			Sheep	Low weight			
			Sheep	Breeding ewe			
			Goats	High weight			
			Goats	Low weight			
			Goats	Breeding doe			
			Pigs	Baconers			
			Pigs	Porkers			
			Pigs	Breeding sow			
			Chicken	Broiler			
			Chicken	Day old chick			
			Other	specify			
etc		Dist 2.....	Cattle	Premium/Export			

* Specify Administrative or Technical boundaries (admin or techn)

1) Species: this includes adults and weaners of all sexes and breeds

2) The types of Market (Infrastructure) where data are collected from are listed below:

a. Primary markets	c. Industrial abattoirs	e. Agricultural show grounds
b. Secondary markets	d. Municipal abattoirs & slaughter slabs	f. Auction sales pen
		g. Holding grounds

3) Types of Prices include:

- a. Open Farmers price (price at which farmers sell their animals mainly at primary markets)
- b. Open Auction price (for the purchase of breeders, weaners or slaughter animals)
- c. Public Baseline price at abattoir - reserve price (fixed price offered by the buyer to the farmers)
- d. Contract price with abattoir (price set by negotiation between buyer and seller other than at primary market which are generally open)

Please enter data by selecting the different combination (species/type of market/type of price) applicable to your case by adding more rows if needed.

In LIMS there is always an ultimate possibility to modify a label or add some categories but it must be done at SADC level so that the central (regional) database remains compatible with all categories implemented at national level (i.e. with the national LIMS) mainly because of data transfer coding and send-receiving procedures.

A few comments from the Angolan team:

Angola accepted the change requested by Zambia on addition of one category the "Village chicken", an important item for monitoring LS price and therefore affordability of an additional source of protein in the rural area. If this is the willingness of a majority of MS, then it will be added into LIMS.

Concerning eggs it was also agreed to add price of egg trays (then we must specify trays of how many; e.g. 6, or e.g. 18, or e.g. 30 eggs in visited outlets).

These parameters (categories of items) are managed under the reference data screen and functions, with range of figures when useful.

Livestock Information Management System - [Reference Data Types]

Administration Livestock Development Animal Health Animal Production Livestock Trade and Marketing Tapez une question

Reference Data

Reference Type: Abattoir Facilities
Minimum Value: 96801
Maximum Value: 96900

Reference Type	Description	Minimum	Maximum
Abattoir Facilities	Definition of species age sex categories	96800	96150
Age Sex Category	Definition of kinds of breeds	90000	29999
Breed Category	Causes for rejection	20000	97400
Cause for Rejection	Certification Bodies	97351	96200
Certification Bodies	Dairy Plant Facilities	96101	96200
Dairy Plant Facilities	Data Sources	96901	97000
Data Sources	Definitions	90401	90500
Definitions	Domestic	90501	90500
Domestic	Others	90502	90500

Reference Data Types | Reference Values | Reference Relationships

Reference Type: Abattoir Facilities
Description: Abattoir Facilities
Minimum Value: 96801
Maximum Value: 96900

Date Created: 01/01/2008
Created By: admin
Date Modified: 01/01/2008
Modified By: admin

Reference Type 2 Relation Type Date Created Created By Date Modified Modified By

Mode Formulaire NUM

The screen to add a category in LIMS

- Module 5 *Livestock & Products trade: import/export / Importação e Exportação / Import et Export*
 - 1. *Live Animals / Animal vivo / Animaux vivants*
 - 2. *L. stock Products / Producto animais / Produits d'élevage*
 - 3. *L. stock Inputs / Inputs / Intrants de l'élevage*

1a. Live Animals Import (in numbers)
Importação de animais vivos

HS (1) nível	HS (2) Código	HS nome	Espécie	Raça	Categoria Idade & Sexo	IMPORTACAO				
						Numero importado	Moeda local	Valor (3)	USD	porto de entrada

1) HS levels for selection are level 2, or level 4 or level 6
 2) The HS Codes for selection are attached to this reporting format.
 Please refer to the list to identify the species and type of animal or livestock product and the corresponding HS Code
 Note: often species, breed and category are grouped in HS codes; hence not always possible to report per species, breed or category
 3) Reporting officers are expected to choose either the Local Currency or the U.S. Dollars for the value of the transaction
 Import values are expressed preferable as CIF by default (Cost, Insurance & Freight) and before any taxation or subsidy
 Export values are expressed preferable as FOB by default (Free on Board) and before any taxation or subsidy

1b. Live Animals Export (in numbers)
exportação de animais vivos

HS (1) nível	HS (2) Código	HS nome	Espécie	Raça	Categoria Idade & Sexo	EXPORTACAO				
						Numero exportado	Moeda local	Valor (3)	USD	porto de saída

Cidades comem carne importada e meios rurais o produto nacional

Brasil e África do Sul são os principais fornecedores

AUGUSTO CUTETA |

A carne importada continua ainda a ser a mais consumida entre os habitantes das zonas urbanas do país, segundo revelou em Luanda, a directora adjunta do Instituto de Serviços de Veterinária, Bernardete Santana.

Vários esforços têm sido desenvolvidos para que a actividade pecuária nacional possa ocupar um lugar de destaque, com vista a atingir os níveis de consumo verificados actualmente nas zonas rurais, onde a carne local é a mais consumida.

Apesar de divulgar a informação, Bernardete Santana preferiu não falar em estatísticas, quando se referiu ao consumo de carne proveniente do exterior por pessoas que vivem nas grandes cidades do país.

Bernardete Santana salientou que o Brasil, a Argentina, a África do Sul e alguns países da Europa são as origens de grande parte da carne consumida nas zonas urbanas de Angola.

Este quadro, relativo à informação pecuária, pode conhecer dias melhores. Desde sexta-feira, um sistema de gestão da informação pecuária começou a ser executado em Angola, numa recomendação dos Estados-membros da SADC.

O lançamento do sistema decorreu durante um seminário, realizado na capital do país, colocando



FOTO: AFP

Desenvolvimento da pecuária nacional vai ajudar a alterar o quadro

Angola entre os 11 Estados da SADC que já iniciaram a execução do projecto.

O sistema permite dotar a sociedade e as autoridades governamentais de elementos necessários à tomada de medidas preventivas ou correctivas para a salvaguarda do bem-estar das populações, tal como disse na abertura do seminário o vice-ministro da Agricultura, José Amaro Tati.

É importante salientar que o sistema de gestão da informação pecuária pode contribuir para que os

técnicos tracem estratégias para fazer face a doenças como a peripneumonia, que são as que mais afectam os animais do país.

Bernardete Santana disse ao "Jornal de Angola" que "no nosso país não há ainda casos de doenças dos pequenos ruminantes, ao contrário do que noticiámos na nossa edição de segunda-feira. Existem registos deste tipo de caídos na vizinha República Democrática do Congo", salientou.

O sistema de gestão de informação permite segurança alimentar.

An article on the International trade of LS products in Angola

2a. Livestock Products Import Importação de produtos

HS (1) nível	HS (2) Código	HS nome	Nome do Produto (3)	IMPORTACAO				
				Volumen importado	Unidade de (4) medida	Valor (5)		porto de entrada
						Moeda local	USD	Partner = País de origem

1) HS levels for selection are level 2, or level 4 or level 6

2) The HS Codes for selection are attached to this reporting format.

Please refer to the list to identify the livestock product and the corresponding HS Code

3) When HS code is not clear, first the popular product name can be filled. Then the HS listing can be consulted for the exact HS code and name.

4) Unit of measure: Unit, Kg, Ltr, MT, M3, etc.

5) Reporting officers are expected to choose either the Local Currency or the U.S. Dollars for the value of the transaction

Import values are expressed preferable as CIF by default (Cost, Insurance & Freight) and before any taxation or subsidy

Export values are expressed preferable as FOB by default (Free on Board) and before any taxation or subsidy

2b. Livestock Products Export Exportação de produtos

HS (1) nível	HS (2) Código	HS nome	Nome do Produto (3)	EXPORTACAO				
				Volumen exportado	Unidade de (4) medida	Valor (5)		porto de saída
						Moeda local	USD	Partner = País de destino

3a. Livestock Inputs Import

Importação de inputs

HS (1) nível	HS (2) Código	HS nome	Nome do Input (3)	IMPORTACAO				
				Volumo importado	Unidade de medida (4)	Valor (5)	porto de entrada	Partner = País de origem
Moeda local	USD							

- 1) HS levels for selection are level 2, or level 4 or level 6
- 2) The HS Codes for selection are attached to this reporting format.
Please refer to the list to identify the livestock input and the corresponding HS Code
- 3) When HS code is not clear, first the popular product name can be filled. Then the HS listing can be consulted for the exact HS code and name.
- 4) Unit of measure: Unit, Kg, Ltr, MT, M3, etc.
- 5) Reporting officers are expected to choose either the Local Currency or the U.S. Dollars for the value of the transaction
Import values are expressed preferable as CIF by default (Cost, Insurance & Freight) and before any taxation or subsidy
Export values are expressed preferable as FOB by default (Free on Board) and before any taxation or subsidy

3b. Livestock Inputs Export

exportação de inputs

HS (1) nível	HS (2) Código	HS nome	Nome do Input (3)	EXPORTACAO				
				Volumo exportado	Unidade de medida (4)	Valor (5)	porto de saída	Partner = País de destino
Moeda local	USD							

The HS system

The trade component requires use of one particular set of nomenclature i.e. the **HS system**, an harmonized system used by the customs. Therefore the CD distributed during the training provides for the entire HS coding scheme though only those codes useful and relevant for the LS sector were implemented into LIMS (animal products, live animals and some inputs, cf. training manuals). So far LIMS provides only for Import / Export of products data at national level.

The screenshot shows the 'Livestock Trade' module of the LIMS system. At the top, there's a header bar with tabs for Administration, Livestock Development, Animal Health, Animal Production, and Livestock Trade and Marketing. Below the header, there's a toolbar with icons for search, refresh, and other functions. On the left, there's a sidebar with buttons for different sections. The main area has several input fields: 'Country: Malawi', 'Year: 2005', 'Period: January', 'Officer: Chirambo', 'Data Source: Customs'. To the right of these, there's a table for 'Current Record Complete HS Description' with columns for Country, Year, and Period. Below these, there's a 'Records Selection' section with dropdown menus for 'Trade Flow' (set to 'Export') and 'HS Level' (set to 'Level 2'). To the right of this, there's a 'Current Record Complete HS Description' section with a large text area for the description. At the bottom, there's a table with columns for Trading Partner, HS Level, HS Category Name, Port of entry or exit, Quantity, Unit of Measure, Monetary Value of Currency, Type of Currency, Computed Date Monetary Modified, and Modified By. The bottom right corner shows some navigation buttons for 'Mode Formulaire', 'FILT', and 'NUM'.

2a. Livestock Products Import

HS (1) level	HS (2) Code	HS name	Product name	EXPORT			
				Volume exported	Unit of (4) measure	Value (3)	
L.currency		USD		Partner = Country of Destination			

1) HS levels for selection are level 2, or level 4 or level 6

2) The HS Codes for selection are attached to this reporting format.

Please refer to the list to identify the livestock product and the corresponding HS Code

3) Reporting officers are expected to choose either the Local Currency or the U.S. Dollars for the value of the transaction

Value are expressed preferable as CIF by default (Cost, Insurance & Freight) and before any taxation or subsidy

4) Unit of measure: Unit, Kg, Ltr, MT, M3, etc.

2b. Livestock Products Export

HS (1) level	HS (2) Code	HS name	Product name	IMPORT			
				Volume imported	Unit of (4) measure	Value (3)	
L.currency		USD		Partner = Country of Origin (source)			

Glossary and other reference documents to be used in national trainings: HS code

The HS code is a new feature used into the LIMS; therefore it required specific training for staff not familiar with it. The HS manuals were introduced and are available in the CD to serve in house training organized by MS. An excerpt of their contents is provided hereafter. We also provided for the Lusophone countries the “**Nomenclatura combinada**” NC i.e. a Portuguese version of an equivalent to the HS system with the HS documents in English for training purpose.

N.^o nível Nome do nível Tipo de código Estrutura do código N^o de categorias

- 1 Secção Números romanos 5 dígitos 21
- 2 Capítulo Numérico 2 dígitos 97
- 3 Posição Numérica 4 dígitos 1237
- 4 Subposição SH Numérico 6 dígitos 5239
- 5 Subposição NC Numérico 8 dígitos 12627
- 6 Subposição
- Numérico 9 dígitos 15

Section I LIVE ANIMALS; ANIMAL PRODUCTS

Notes.

- 1.- Any reference in this Section to a particular genus or species of an animal, except where the context otherwise requires, includes a reference to the young of that genus or species.
- 2.- Except where the context otherwise requires, throughout the Nomenclature any reference to “dried” products also covers products which have been dehydrated, evaporated or freeze-dried.

Chapter 1 Live animals

Note.

1.- This Chapter covers all live animals except :

- (a) Fish and crustaceans, molluscs and other aquatic invertebrates, of heading 03.01, 03.06 or 03.07;
- (b) Cultures of micro-organisms and other products of heading 30.02; and
- (c) Animals of heading 95.08.

Heading	H.S. Code	
01.01		Live horses, asses, mules and hinnies. - Pure-bred breeding animals - Other
01.02	0102.10 0102.90	Live bovine animals. - Pure-bred breeding animals - Other
01.03	0103.10 0103.91 0103.92	Live swine. - Pure-bred breeding animals - Other : -- Weighing less than 50 kg -- Weighing 50 kg or more
01.04	0104.10 0104.20	Live sheep and goats. - Sheep - Goats
01.05	0105.11 0105.12 0105.19 0105.94 0105.99	Live poultry, that is to say, fowls of the species <i>Gallus domesticus</i>, ducks, geese, turkeys and guinea fowls. - Weighing not more than 185 g : -- Fowls of the species <i>Gallus domesticus</i> -- Turkeys -- Other - Other : -- Fowls of the species <i>Gallus domesticus</i> -- Other
01.06		Other live animals. - Mammals : -- Primates -- Whales, dolphins and porpoises (mammals of the order Cetacea); manatees and dugongs (mammals of the order Sirenia) -- Other 0106.20 - Reptiles (including snakes and turtles)

	- Birds :
0106.31	-- Birds of prey
0106.32	-- Psittaciformes (including parrots, parakeets, macaws and cockatoos)
0106.39	-- Other
0106.90	- Other

Nomenclatura combinada

Nº nível. ^o	Nome do nível	Tipo de código	Estrutura do código	Nº de categorias
1	Secção	Números romanos	5 dígitos	21
2	Capítulo	Numérico	2 dígitos	97
3	Posição	Numérico	4 dígitos	1237
4	Subposição SH	Numérico	6 dígitos	5239
5	Subposição NC	Numérico	8 dígitos	12627
6	Subposição	Numérico	9 dígitos	15

An example of the **NC documents** provided in Excel with the CD distributed at the end of the training: here we see the level 2 highlighted in grey, and the derived categories with 4 or 6 (here highlighted as it is the preferred option to describe a category into the LIMS) or 8 digits.

Versão:	V01104	Nomenclatura Combinada, 2008
Data de execução:	09/06/2008	
Nível	Código	Designação
1	I	Animais vivos e produtos do reino animal
2	01	Animais vivos
3	0101	Animais vivos das espécies cavalar, asinina e muar
4	0101.10	Cavalos e asininos, reprodutores de raça pura
	4 0101.90	Animais vivos das espécies cavalar, asinina e muar, vivos não reprodutores de raça pura
3	0102	Animais vivos da espécie bovina
4	0102.10	Bovinos, reprodutores de raça pura
4	0102.90	Bovinos vivos não reprodutores de raça pura
3	0103	Animais vivos da espécie suína
4	0103.10	Suíños reprodutores de raça pura
4	0103.91	Suíños vivos, de peso < 50 kg, não reprodutores de raça pura
4	0103.92	Suíños vivos, de peso = > 50 kg, não reprodutores de raça pura
3	0104	Animais vivos das espécies ovina e caprina
4	0104.10	Ovinos vivos
4	0104.20	Caprinos vivos

		Galos, galinhas, patos, gansos, perus, peruas e pintadas, das espécies domésticas, vivos
3	0105	Galos e galinhas, de peso = < 185 g, das espécies domésticas
4	0105.11	Perus e peruas, vivos, de peso = < 185 g, das espécies domésticas
4	0105.12	Perus e peruas, vivos, de peso = < 185 g, das espécies domésticas
4	0105.19	Patos, gansos e pintadas, vivos, de peso = < 185 g, das espécies domésticas
4	0105.94	Galos e galinhas, vivos, de peso > 185 g, das espécies domésticas
4	0105.99	Patos, gansos, perus, peruas e pintadas, vivos, de peso > 185 g, das espécies domésticas
		Animais, vivos (excepto das espécies cavalar, asinina, muar, bovina, suína, ovina, caprina, galos, galinhas, patos, gansos, perus, peruas, pintadas, assim como, peixes, crustáceos, moluscos e outros invertebrados aquáticos, culturas de microorganismos e semelhantes)
3	0106	Primatas vivos
4	0106.11	

- Module 6 LS *Infrastructures / Infra-Estructuras / Infrastructures*

In LIMS, because of the nature of the IS, some Infrastructures IS will be accounted aggregated by zone, whereas some others are described into details as individual IS. It therefore requires the provision of the zones to be populated in the database.

In fine, some more elements describing the attributes of the described infrastructure, like the availability of Internet access in public offices, could be added or mentioned in comments.

Infrastructures *Agreg.* / Infra-Estructuras Agregados / Infrastructures description agrégées

- 3.*Dipping* / Tanque banheiros / Bain détiqueur
- 4.*Pens* / currais / Enclos de vaccination
- 5. *Vet clinics* / Clinicas vet. / Cliniques vétérinaires
- 6.*Govt Offices* / Officios do governo / Bureaux de l'état
- 7. *Mun Abattoirs & slabs* / Matadouros municipais e locais e casas de matança / Abattoirs locaux et tueries
- 8. *Milk Collection* / Recolha de leite / Récolte de lait liquide
- 9. *Livestock Markets* / Mercados / Marchés
- 10.*Storage Products* / Armazens / Entrepôts et Stocks

1. Type and Number of Dipping Facilities tipo e numero de tanque							
Divisão Tipo*	Divisão ao nível 1, e Divisão ao nível 2, e.g. Região/Província Distrito	Tipo de ** infra-estrutura	Numero Total	Numero Funcional	Frequencia tratamento tomada como alvo por ano***	Estimação da população do gado (bovinos)	numero total dos animais tratados por ano****
	Reg/prov 1.....	Dist 1.....	tanque carracicidas				
			tunel de pulverização				
		Dist 2.....	tanque carracicidas				
			tunel de pulverização				
		Dist 3.....	tanque carracicidas				
			tunel de pulverização				
		Dist 4.....	tanque carracicidas				
			tunel de pulverização				
	Reg/prov 2.....	Dist 1.....	tanque carracicidas				
			tunel de pulverização				
		Dist 2.....	tanque carracicidas				
			tunel de pulverização				
		Dist 3.....	tanque carracicidas				
			tunel de pulverização				
		Dist 4.....	tanque carracicidas				
			tunel de pulverização				
	etc						

* Specify Administrative or Technical division (admin or techn)
** Enter *dip tank* or *spray race*
***Optimum dipping frequency per year, based on the dipping strategy in that particular district (routine target)
**** Total nr of cattle dipped per year: accumulated nr. of cattle that were dipped (or sprayed) once or more times in this particular year

tanque carracicidas / banho acaricida



Benguela Tanque banheiro / banho acaricida



Huíla. water point / Borehole /Forage.



Huambo. Vaccination crush pen /Couloir de vaccination.



Benguela. Water point Tanks / Point d'eau approvisionné par des citernes.

2. Type and Number of Crush Pens, Wool Pens and Artificial Insemination (AI) Pens tipo e numero de currais							
Divisão Tipo*	Divisão ao nível 1 Região/Província	Divisão ao nível 2, e. Distrito	Tipo de ** infra-estrutura	Numero Total	Numero Funcional	Capacidade Óptimo ***	Numero de animais presentados****
.....	Reg/prov 1.....	Dist 1.....	curral				
			parque de inseminação				
			parque de tosquia				
		Dist 2.....	curral				
			parque de inseminação				
			parque de tosquia				
		Dist 3.....	curral				
			parque de inseminação				
			parque de tosquia				
		etc					

* Specify Administrative or Technical division (admin or techn)
** The type of infrastructure includes *Crush Pen*, *Wool Pen* and *AI Pen*
*** The total number of animals (cattle or small ruminants) which can be vaccinated/treated/inseminated during a period of one year at the Pens
**** The actual number of *cattle vaccinated or inseminated* at the Pens during year of reporting or number of *sheep and goats vaccinated or treated*

Note: Crush and AI pens applies to cattle and wool pens to sheep and goats

curral / parque de retenção

3. Type and Number of Veterinary Clinics numero de clinicas veterinarias							
Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2, Distrito	Total que percente ao		Número funcional		
			Sector Público	Sector Privado	Público	Privado	
.....	Reg/prov 1.....	Dist 1.....					
		Dist 2.....					
		Dist 3.....					
		Dist 4.....					
.....	Reg/prov 2.....	Dist 1.....					
		Dist 2.....					
		Dist 3.....					
		Dist 4.....					
etc							

* Specify Administrative or Technical division (admin or techn)
Sector Público / estatal

4. Type and Number of Government Livestock Offices tipo e numeros de estação do governo				
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Total numero de estação/secção medicina veterinaria	Total numero de estação/secção pecuária do governo
.....	Reg/prov 1.....	Dist 1..... Dist 2..... Dist 3..... Dist 4.....		
.....	Reg/prov 2.....	Dist 1..... Dist 2..... Dist 3..... Dist 4.....		
	etc			

* Specify Administrative or Technical division (admin or techn)

Total numero de secção pecuária do governo / produção animal

5. Type and Number of Municipal Abattoirs and Slaughter Slabs tipo e numero de matadouros (local/municipal, casa de matança)							
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, Distrito	Tipo**	Numero Total	Numero funcional	Capacidade maxima agregada *** por ano	Numero animais abatidos este ano
.....	Reg/prov 1.....	Dist 1..... Dist 2..... Dist 3..... Dist 4.....	Mun casa Mun casa Mun casa Mun casa				
.....	Reg/prov 2.....	Dist 1..... Dist 2..... Dist 3..... Dist 4.....	Mun casa Mun casa Mun casa Mun casa				
	etc						

* Specify Administrative or Technical division (admin or techn)

** For the Type enter either Municipal Abattoir or Slaughter Slab

*** The Aggregate Maximum capacity refers to the total number of animals (only cattle here) which can be slaughtered during 1 Year in the selected abattoirs

6. Number and Capacity of Milk Collection Centres and Cooling Tanks numero e capacidade de recolha de leite								
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível Distrito	Tipo** de centros de recolha	Numero de centros	Numero functional	Quantidade de leite recolhida este ano (litr)	Capacidade total de arrefecimento ltr ***	Numero de protutores registados / inscritos no centro
.....	Reg/prov 1.....	Dist 1.....	com arrefecimento					
			sem arrefecimento					
		Dist 2.....	com arrefecimento					
			sem arrefecimento					
		Dist 3.....	com arrefecimento					
			sem arrefecimento					
		Dist 4.....	com arrefecimento					
			sem arrefecimento					
.....	Reg/prov 2.....	Dist 1.....	com arrefecimento					
			sem arrefecimento					
		Dist 2.....	com arrefecimento					
			sem arrefecimento					
		Dist 3.....	com arrefecimento					
			sem arrefecimento					
		Dist 4.....	com arrefecimento					
			sem arrefecimento					
	etc							

* Specify Administrative or Technical division (admin or techn)
** For the Type: enter With or Without cooling facilities.
*** Example cooling capacity: two cooling tanks @ 1,000 ltr = 2,000 ltr cooling capacity

7. Number and Distribution of Primary Livestock Markets numero e distribuição dos mercados								
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, Distrito	Numero de mercados primários de gado	Numero de animais (bovinos) apresentados (disponíveis)	Numero de ovinos apresentados (disponíveis)	Numero de caprinos apresentados (disponíveis)	Numero de caprinos vendidos	Numero de caprinos vendidos
.....	Reg/prov 1.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
		Dist 4.....						
.....	Reg/prov 2.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
		Dist 4.....						
	etc							

* Specify Administrative or Technical division (admin or techn)
Note: Primary market: from farmer to trader or consumer (n/a secondary market: from trader to trader or consumer and tertiary market from trader to retailer)

8. Type and Distribution of Storage of Products tipo e distribuição de armazéns								
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, Distrito	Tipo de Armazenamento**	Numero de instalações	Capacidade de armazenamento agregado **	Armazenamento real**	Unidade de medida (kg, ltr ou unidade)	
.....	Reg/prov 1.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
		Dist 4.....						
.....	Reg/prov 2.....	Dist 1.....						
		Dist 2.....						
		Dist 3.....						
		Dist 4.....						
	etc							

* Specify Administrative or Technical division (admin or techn)
** Select Type of Storage from listing below:
1. Fibre storage (in kg) 6. Frozen meat storage, equivalent carcass weight (in kg)
2. Hide and/or skin storage (in units) 7a. UHT milk storage (in ltr)
3. Feather storage (in kg) 7b. Cheese storage (in kg)
4. Pelts storage (in units) 7c. Butter storage (in kg)
5. Render plant (in kg) 7d. Milk powder (in kg)
*** Stock taking at same date of year for all years

Infrastructures Detailed / Infra-Estructuras detalhados / Infrastructures détaillées

- 1. *Vet Diagnostic Labs* / Laboratorios / Laboratoires de diagnostic
- 2. *Vet Vaccine Labs* / Productores de Vacinas / Producteurs de vaccins
- 3. *Industrial Abattoirs* / Matadouros industriais / Abattoirs industriels

- 4. *Dairy Processing Plants* / Usina de transformação de leite / Unité de transformation laitière
 - 5. *Secondary Markets*, / Mercados secundarios / Marchés secondaires
 - 6. *Port of Entry & Exit* / Portos de entrada e saída / Postes d'inspection en frontière PIF

1. Type, Distribution and Competence of Veterinary Diagnostic Laboratories

Typo distribuição e competencias dos laboratorios de diagnostico veterinario

* Specify Administrative or Technical division (admin or techn)

“Level refers to the mandate in terms of coverage given to the laboratory and usually is National, Regional or Provincial and District.

*** Enter here the disease(s) the laboratory is assigned as reference for

Ag = Antigen detection

Ab = Antibody detection

Iso = Isolation of agent (shouldn't be confused with ISO = International Standards Organisation)

2. Type, Distribution and Competence of Veterinary Vaccine Manufacturing Laboratories

Tipo, distribuição e competências dos laboratórios de produção de vacina veterinária

* Specify Administrative or Technical division (admin or techn)

** Ownership: specify a) parastatal, b) private or c) public

***If Yes, please indicate number of doses produced in this particular year

**** Drugs produced in this particular year (yes or no)

3. Type and Distribution of Industrial Abattoirs tipo et distribuição de matadouros

* Specify Administrative or Technical division (admin or techn)

**** Ownership:** specify a) parastatal, b) private or c) public

*** Export? Refers to whether the abattoir exports meat or not

**** Extra facilities: please specify if the abattoir has following extra facilities (yes or no):

- a) cold storage
 - b) hide and skin storage
 - c) mini-lab (private analysis)
 - d) primary meat processing (cutting)
 - e) secondary meat processing (heating, smoking, canning, etc.)

4. Type, Distribution and Capacity of Dairy Processing Plants

* Specify Administrative or Technical division (admin or techn)

** Ownership: specify a) parastatal, b) private, or c) public

*** Export? Refers to whether the dairy plant exports dairy products or not

***** Extra facilities: yes or no. Specify others.

5. Number and Distribution of Secondary Markets, Sale pens, Feedlots etc.

* Specify Administrative or Technical division (admin or techn)

*Types include: a) Auction sale pen, b) Agricultural show ground, c) Feedlot sale pen, d) Holding ground e) Secondary market and d) Tertiary market

***Types include: a) Auction sale pen, b) Agricultural show ground, c) Other

Note: (Primary market: from farmer to trader or consumer;) Secondary market: from trader to trader or consumer and Tertiary market from trader to retailer

Note: (Primary market: from farmer to trader or consumer,) Secondary market: from trader to trader or consumer and Tertiary market: from trader to retailer

sessões por ano / leilões

Research stations :

« La plupart des stations zootechniques sont localisées à Huila (Humpata, Caconda, Quilengues), à Namibe (Lungo, Caraculo) et à Benguela (Ganda, Dombe grande). Elles sont partiellement opérationnelles, à l'exception de Quilengues et Ganda, qui ont besoin de travaux de réhabilitation. »

Province	Municipalité		Province	Municipalité		Province	Municipalit é	
Benguela	Lobito	1	Huambo	Longonjo	16	Huila	Kalukembe	31
	Bocoio	2		Kaala	17		Tchipungo	32
	Balombo	3		Huambo	18		Kakonda	33
	Benguela	4		Tchicala- Tcholohanga	19		Chicomba	34
	Kaimbambo	5		Kachiungo	20		Matala	35
	Cubal	6	Namibe	Namibe	21		Chipindo	36
	Ganda	7		Kamukuio	22		Jamba	37
	Baia Farta	8		Bibala	23		Kuvango	38
	Chongoroi	9		Virei	24	Cunene	Kuroka	39
Huambo	Londuimbal i	10		Tombua	25		Kahama	40
	Bailundo	11	Huila	Quilengue	26		Ombadja	41
	Mungo	12		Lubango	27		Kuvelai	42
	Chinjenje	13		Humpata	28		Kwanyama	43
	Ukuma	14		Chibia	29		Namakunde	44
	Ekunha	15		Gambos	30			



Huila. Research station / Station zootechnique de Humpata (7000 ha, 104 staff, 60 bovines et 60 pigs).

Veterinary labs :

Il existe six laboratoires en Angola, dont trois (Benguela, Lubango et Huambo) dans la zone d'étude. Le laboratoire de Huambo a été détruit pendant la guerre et il n'est pas encore opérationnel. Celui de Benguela est en mesure de réaliser des simples analyses de routine. Le laboratoire de Lubango a bénéficié de divers travaux de réhabilitation, et son personnel (qui comprend trois vétérinaires) a reçu diverses formations. Il peut effectuer des analyses diagnostiques pour la PPCB, la Brucellose et la Dermatose Nodulaire Contagieuse des Bovins. Actuellement, un projet prévoyant l'équipement de ces laboratoires et la formation des techniciens est sur le point de démarrer (voir section suivante sur les organisations internationales).

- Module 7 Meat Inspection / Food safety / Segurança Sanitaria dos alimentos / Sécurité sanitaire des aliments
 - 1. Ante-mortem / Inspecção ante mortem / Inspection ante mortem en abattoir
 - 2. Post-mortem / Inspecção post mortem / Inspection post mortem en abattoir

1. Ante-mortem inspection Inspecção ante mortem											
Divisão Tipo*	Divisão ao nível 1, e.g. Região/Província	Divisão ao nível 2, e.g. Distrito	Categoria de infra-estrutura para abate		Espécies (3)	Número de animais examinados	Número de animais com rejeições por causa de doença (4) ou condição (5)				Número de animais abatidos não especificado
			Matadouro Municipal (1) ou casa de matança (# com relatórios)	Matadouro Industrial (2) (nome)			doença1	doença2	doença3	doença4: condição1: condição2:	
....	Reg/prov 1.....	Dist 1									
etc		Dist 3									

Meat inspection in abattoirs / Inspection de la viande aux abattoirs.

L'inspection sanitaire de la viande après abattage est effectuée par du personnel des Services vétérinaires. D'après ce que l'on a pu constater, elle est réalisée sur tous les animaux abattus dans les abattoirs officiels et, parfois, aussi dans les petits abattoirs "informels". Dans la plupart des abattoirs, la méthode d'abattage reste basique. Les animaux sont découpés par terre les uns après les autres, avec éventuellement un seau d'eau pour rincer le sol du sang et des résidus organiques, et il n'existe pas de véritable chaîne de transformation. Ce procédé donne lieu à des pollutions

microbiennes secondaires, mais aussi rend possible la contamination de la viande par des agents pathogènes potentiellement très graves, quand des animaux sains sont abattus après un malade.



Cunene. Abattoir la Peccus.



Huambo town. municipal abattoir.

2. Post-mortem Inspection
inspeção post mortem

- a) Continue from table 1 (ante-mortem inspection) with entering total number of animals slaughtered per species (enter data for each species separately)
- b) Enter first the number of cases affected by each type of **lesion** before proceeding to the number condemned
- c) One sheet needs to be completed for Municipality abattoirs & slabs. Another sheet needs to be completed in case of an Industrial abattoir

Nome Região ou Província	Nome Distrito	Matadouro municipal/local ou casa de matança (# com relatórios) =	OU ^c	matadouro Industrial (nome)
ESPECIES		Número afetados (casos)		Carcáça e partes de carcaça		
# Abatidos				carcáça inteira embargo total		Órgãos
				carcáça inteira embargo parcial		Cabeça
				Media carcáça embargo total		Coração
				Media carcáça embargo parcial		Rins
				quarto dianteiro embargo total		Fígados
				quarto dianteiro embargo parcial		Língua
				quarto traseiro embargo total		Estômago
				quarto traseiro embargo parcial		Intestinos
						Rata
						Pulmões
Lesões da carcaça, cortes & órgãos	NUMERO DE CARCACAS, PARTES DE CARCACAS E ORGÃOS COM REJEICAO					
Abcesso/Pyaema						
Contusão						
Cisticercose						
Contaminação						
Emaciação						
Edema						
Parasitose Indeterminada						
Tuberculose						
Tumor						
Indeterminada						
Lesões especificamente dos órgãos	NUMERO DE CARCACAS, PARTES DE CARCACAS E ORGÃOS COM REJEICAO					
Actinobacilose						
Actinomicose						
cirrose						
Fasciolase						
Hidatidose						
Nefrite						
Pericardite						
Peritonite						
Pleurisia						
Pneumonia						
Baço						

- Module 8 *Livestock Associations and Service Providers / Associações de criadores e fornecedores de servicios / Association d'éleveurs et fournisseurs de services*
 - 1.Umbrella org & assoc / Associações / Associations et Confédérations
 - 2.Private companies / Privado / Secteur privé
 - 3.Government / Publico / Secteur public

This is a non-quantitative module (made of a listing making a directory of addresses etc.). All registered companies can be easily tracked back from information in other ministries (e.g. trade)

Province of Huila :

Associação Agropecuária e Comercial do Lubango (AAPCIL) (Association d'agro élevage et de commerce de Lubango) et Cooperativa dos Criadores de Gado do Sul de Angola (CCGSA) (Coopérative des éleveurs de bétail du sud de l'Angola)

- Module 9 *LS related Laws, Regulation and Acts, policy docs* / Legislação e politicas agro pecuaria / Législation et documents de politique sur le secteur élevage
 - 1.*National Docs* / Nivel nacional / niveau national
 - 2.*International Docs* / Niveis internacional e regional (SADC) / Niveau international ou sous régional (SADC)

This is a non-quantitative module (made of a listing making a directory of addresses etc..). There will be amendment in the list of documents (nomenclature) to be described as there are at least two legal systems in place in SADC, one originating from French and Portuguese legislation (code Napoleon) and the other from the British legislation.

Legal framework land tenure :

Seules deux lois en relation directe avec le sujet ont été identifiées :

- Loi n°9/04 du 9 novembre 2004 : Loi foncière ("**Lei de terras**").
 - Loi n°4/04 du 13 août 2004 : Loi de santé animale ("**Lei de sanidade animal**").

Ces deux lois sont très récentes et abrogent toute la réglementation précédente dans la matière.

Ex : Loi n° 9/04 du 9 novembre 2004 (voir Annexe 7).

Cette loi, nommée "**Lei de terras**", donne un cadre législatif général au droit foncier. Elle abroge toutes les lois précédentes. Un règlement d'application est actuellement en attente d'approbation.

Une analyse de cette loi fait apparaître une bonne prise en compte des droits coutumiers et une reconnaissance du droit à la terre des communautés rurales :

- Respect des droits des communautés rurales (Art. 4, alinéa E).
 - Interdiction de l'usucaption des terres d'une communauté rurale (Art. 6, alinéa 4).
 - Prise en compte des coutumes et du droit traditionnel (Art. 9, alinéa 1; Art. 37, alinéa 1; Art. 51, alinéa 2; Art. 82).
 - Inaliénabilité de la propriété des terres d'une communauté rurale (Art. 19, alinéa 7).
 - Garantie des couloirs d'accès à l'eau et aux pâturages (Art. 23, alinéa 1).
 - Concertation avec les pouvoirs traditionnels sur les décisions impliquant les terres d'une communauté (Art. 23, alinéa 2; Art. 37, alinéa 4; ...).
 - Gratuité de la reconnaissance du droit de propriété par une communauté. (Art. 37, alinéa 6; Art. 47, alinéa 2).
 - Perpétuité de la propriété des terres communautaires (Art. 55, alinéa 1.b).
 - Reconnaissance de l'existence juridique des communautés rurales (Art. 70, alinéa 3).

Loi n° 4/04 du 13 août 2004 et son règlement d'application (voir Annexe 6)

Cette loi, nommée "**Lei de sanidade animal**", donne un cadre législatif général au contrôle sanitaire des animaux et de leurs produits. Elle abroge également toutes les lois et règlements précédents. Son règlement d'application est en attente d'approbation et, comme dans le cas précédent, il apporte peu à la loi mère.

2. International Legal Documents and Agreements (mainly SADC) Governing the Livestock Sector

Convenções Acordos e protocolos internacionais sobre o sector da pecuária

* This category includes

1. Policies (including Common Agricultural Policies)
 2. Protocols
 - 3. Treaties**
 4. Conventions
 - 5. Agreements**
 6. Memorandum of Understandings
 7. Declarations
 8. Directives
 9. Recommendations/Resolutions
 10. Terms of References
 11. Others (specify)

***Whether paper or electronic copy of the document was provided with this report.
If YES for electronic copy, please paste appropriate website and/or the name of the attached file.

3. Tratados
5. Accordos

- Module 10 *Disease Outbreak notification* / Notificação dos surtos de doenças / Information sanitaire notification d'épidémies animales
 - *Outbreaks* / Epidemias focos / Foyers d'Epizooties animales

The template is compliant with the manual already published for SADC.

Angola Free of some disease (from absence of notification :)

Peste bovine : dernièrement rapportée en 1972.

Peste des Petits Ruminants (PPR), Peste Porcine Classique, Blue tongue, Varioles caprine et ovine, Maladie vésiculaire des suidés, Stomatite vésiculeuse, Influenza aviaire hautement pathogène : jamais rapportées.

Fièvre aphteuse : dernièrement rapportée en 2000-2001.

Trypanosomiase : uniquement présente dans la partie nord et dans l'extrême est de l'Angola, pas dans la zone d'étude à l'exception du nord-ouest de Benguela.

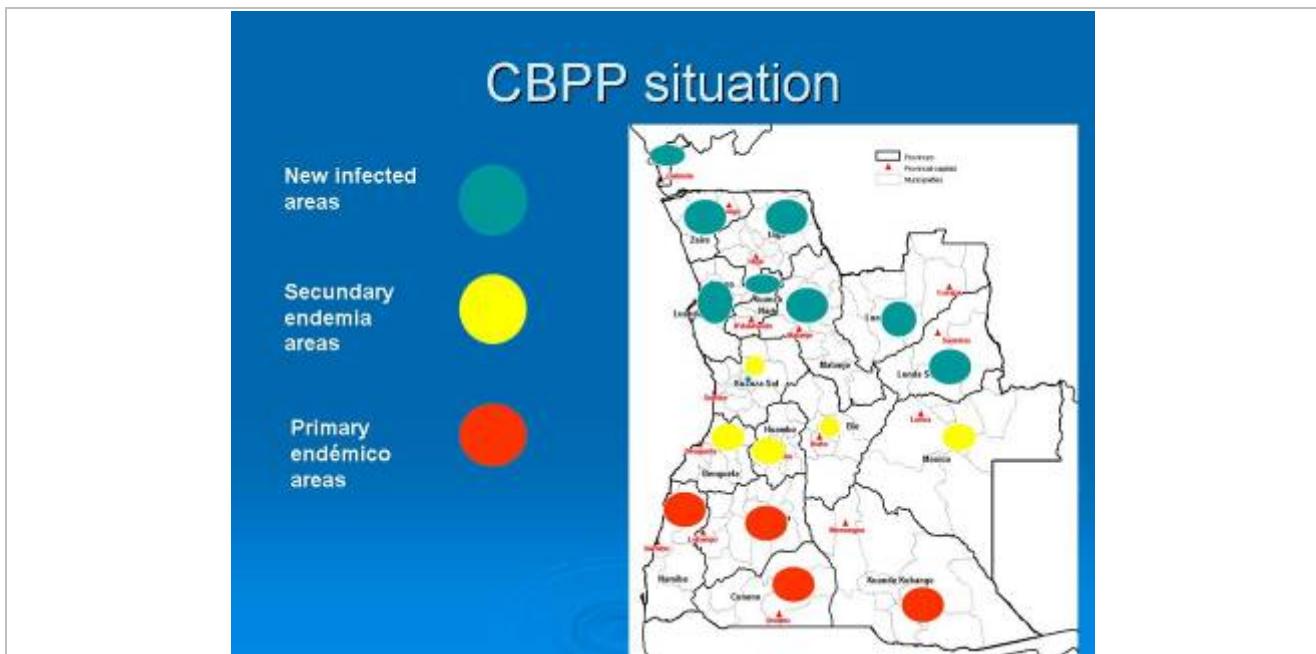
- Module 11 *Vaccinations* (e.g. TAD's) / Vacinação / Vaccinations
 - 1. *Vaccination* / vacinações efectuadas / Vaccinations effectuées (prophylactique et de contrôle)

1. Vaccination vacinação															
Divisão Tipo*	Divisão ao nível 1 e.g. Região/Província	Divisão ao nível 2 e.g. Distrito	Código de referência** do surto	Doença	Espécie	Localização Tipo***	Nome	Lat.	Long.	Vacinação de profilaxia	Vacinação de controlo	Fonte de Vacina****	número de lote	Data de fabricação	Data de validade
.....	Reg/prov 1	Dist 1....													
		Distr 2....													
etc		Dist 3....													

* Partition Type: Administrative or Technical division (admin or techn)
** See monthly disease report for outbreak reference (if applicable)
*** Location type:
a) Farm
b) Village
c) Cattle post/camp
d) Dip tank
e) Crush pen
****Vaccine source = manufacturer

Three mandatory vaccination run by the state: CBPP, Anthrax, BQ

Au niveau national, il existe trois vaccinations obligatoires pour les bovins : la PPCB, le Charbon bactérien et le Charbon symptomatique. Une quatrième est facultative et généralement pratiquée en même temps que les trois autres: la DNBC.



CBPP is a major issue in Angola, though vaccination coverage is increasing.

Animal Vaccinated CBPP – A - BI

Year	Animal Vaccinated	Coverage Rate %
1999	596.209	17
2000	127.940	15
2001	786.513	20
2002	866.836	24,7
2003	973.519	27,8
2004	856.913	24,48
2005	In course - 732.984	20,36
2006	1.012.773	28,13

CBPP vaccination stats



Benguela. Vaccination.

There are two official periods for the vaccination campaigns : March to april and september to november.

Officiellement, deux campagnes de vaccination par an sont prévues (mars/avril et septembre/novembre).

Related Manuals on templates and the LIMS application

The draft generic manuals prepared by PRINT were not fully released at this stage, they will be updated with comments made during the trainings. The same applies for the Users manual (on how to manage the software). They are expected by March 2009 and will be posted on line and sent to MS. In general we recommend that Specific illustrations and comments for the country be added for any national training, to make them user friendly and more specific for the country. Therefore, it is recommended to add an empty frame in any manual for MS to add their own illustrations and text, in addition to the SADC generic contents provided. The revision of the manuals shall be further part of the mandate of the sub committees of SADC LTC.

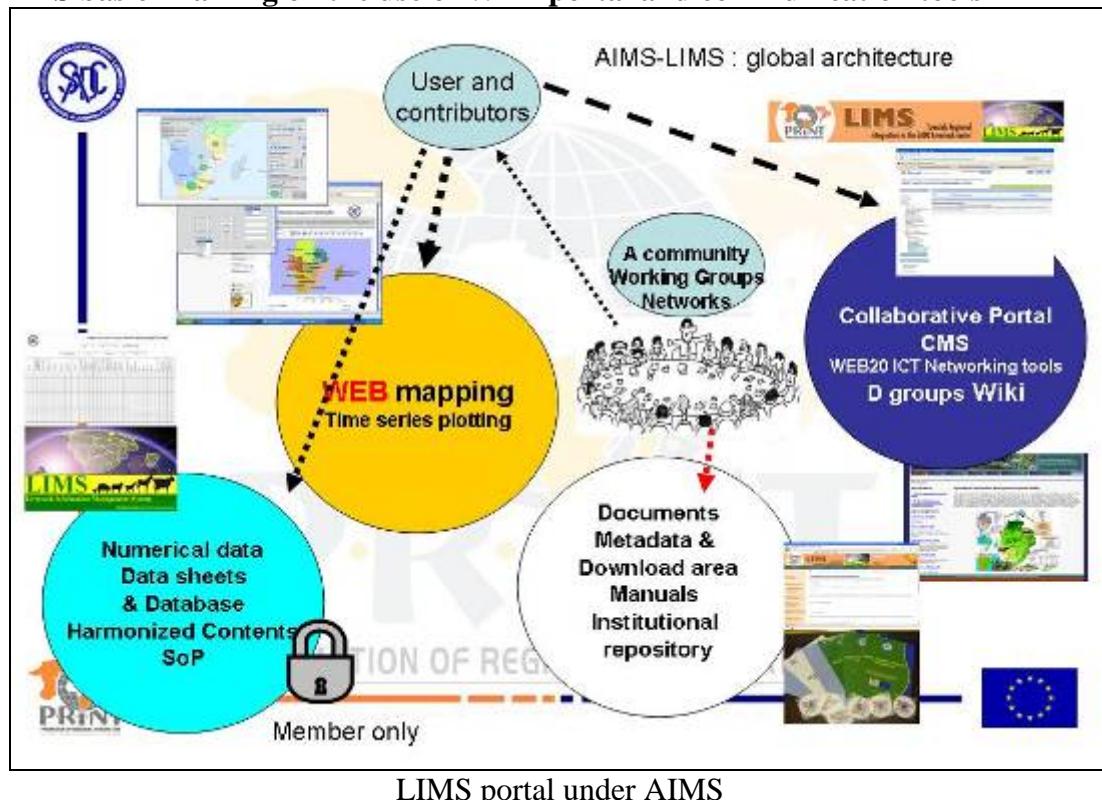
Bugs and correction requested based on LIMS training in Angola

Comments sheets were distributed during the training and shall be sent to PRINT so that a compilation is made at SADC level. Nevertheless, the report provides for a first set of comments. A procedure for installing LIMS on Vista machine is also available (since the mission in Zambia) as almost all new computers come as Vista machines (cf annexe VI).

Fast presentation on the AIMS portal

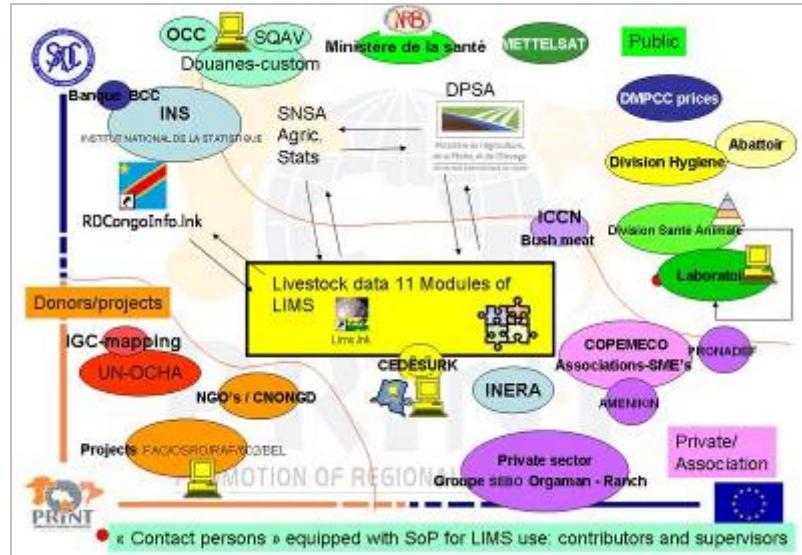
"A web portal presents information from diverse sources in a unified way. Apart from the standard search engine feature, web portals offer other services such as e-mail, news, stock prices, information, databases and entertainment. Portals provide a way for enterprises to provide a consistent look and feel with access control and procedures for multiple applications and databases, which otherwise would have been different entities altogether. (source Wikipedia)."

Web LIMS basic Training on the use of WEB portal and communication tools



3-3. Drafting of first SoP's for LIMS for Angola

SoP's are aimed at indicating the **roles and functions** of some institutions when **contributing** (and **using**) the LIMS. After listing the relevant institutions that can contribute to the LIMS, one should select the most relevant ones, and then convene a meeting with them and then agree on to organize the data flow. Therefore it will support the completion of the entire information chain for the given module or component of LIMS taken care of.



A comprehensive stakeholder map made in DRC for LIMS information, will now be reduced according to templates and modules and then reorganized in order to produce a set of recognized and accepted diagrams for contribution and use to/of LIMS.

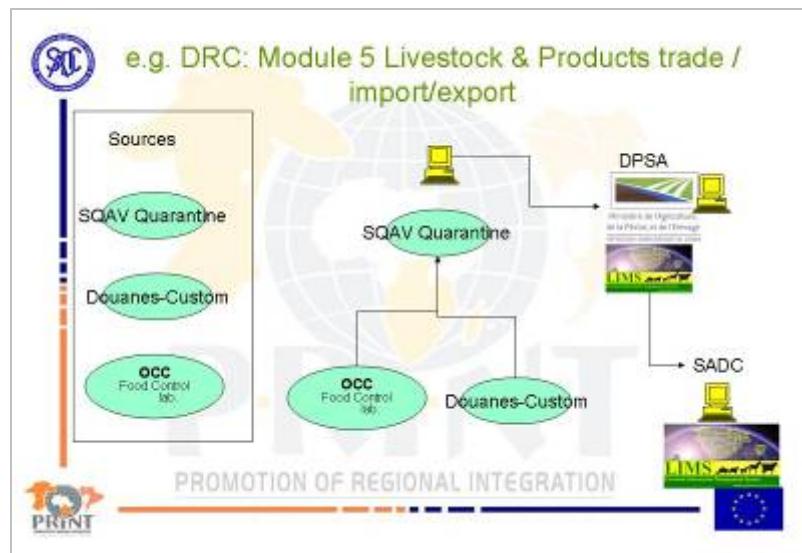
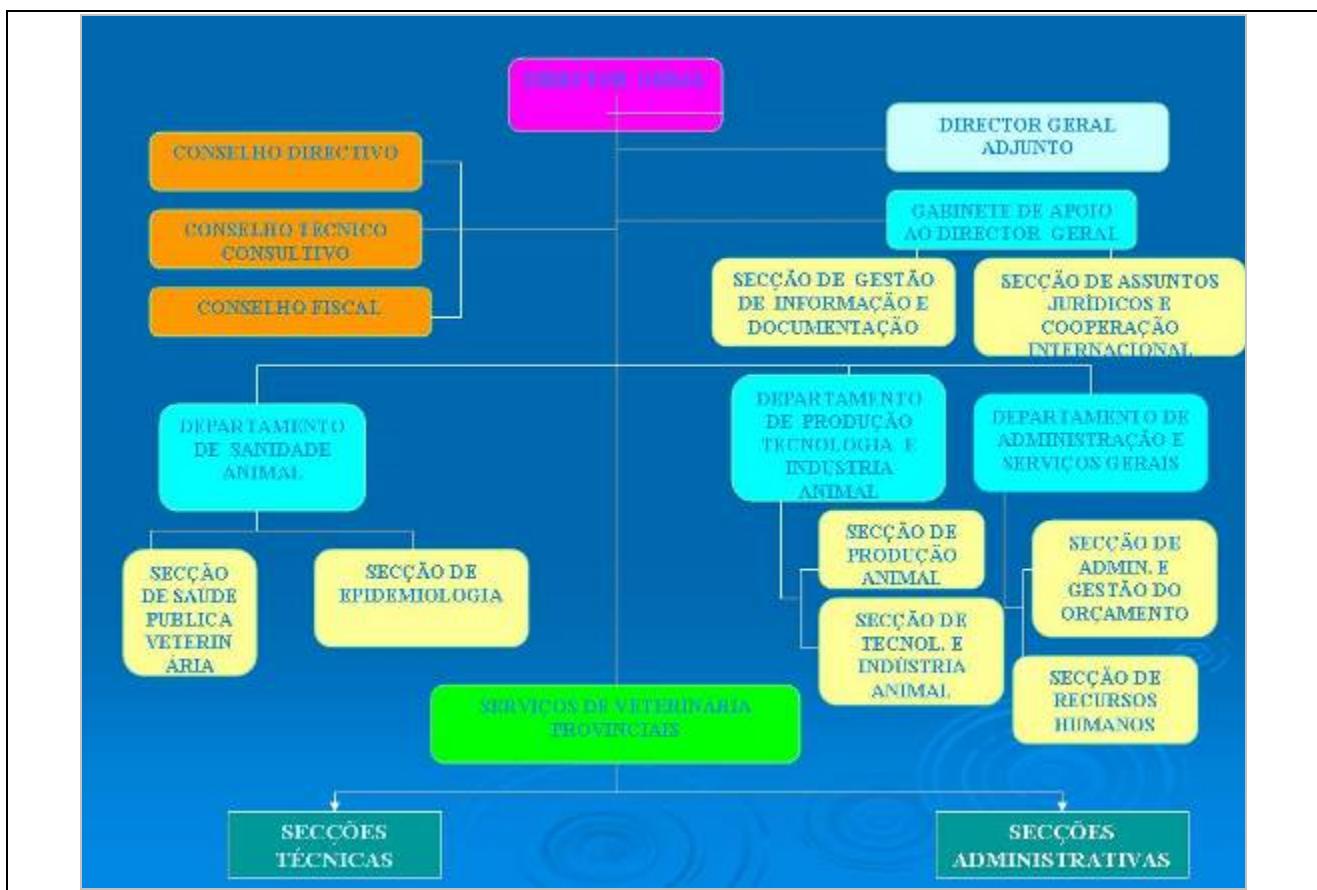


Diagram to be included into an SoP for the Module 5

This is an example of a diagram to be included into an SoP for the Module 5: in DRC three institutions were identified as potential sources and one was selected to capture the data into LIMS and then transfer dataset to a national database, before it is reported to SADC. An information system using a LAN is highly recommended though the system provides for transferring data in other means (email an attached file, uploading through FTP, physical transfer by flash disk etc..).



The various sections of the ISV in Angola shall also agree on several SoP's

The aggregation of individual diagrams can be attempted to present a global picture on how information will flow, therefore providing for the entire rationale of the LIMS network. It would explain how data flows from primary source to secondary and to the central database, using multiples sources (private and public) and multiple scales, all data being aggregated at a certain stages, therefore respecting the privacy of information provided. The presence of a central server would help.

The general principle of LIMS is to share the effort of collecting the data therefore it requires the contribution of various institutions selected from the existing sources belonging to the national AIMS / LIMS networks. Therefore it is essential that such LIMS networks are formed in all MS.

Principles to be used for LIMS management

4. Processed Dairy Products (from all species)												
Partition 1, e.g. Region/Province	Partition 2, e.g. District	Pasteurized milk Lt**	UHT milk Lt	Fermented milk Lt	Yoghurt Lt	Cheese Kg**	Butter Kg	Cream Lt	Powder milk Kg	Other* products	Other * products	Other * products
Reg/prov 1.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
Reg/prov 2.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
etc												

* Specify which product
 ** Lt= Litres, Kg= Kilograms

LIMS: Milk equivalent not working
 LIMS: unit of measure kiloliters??

LIMS gives option for cattle and goat = wrong
 LIMS: take out option "milk"
 Not in LIMS: fermented milk, cream, other products
 LIMS: Yoghurt/fermented products together

The dairy production template belongs to the production parameters module and to the animal production component.

Processo Standardizado por el manejo / a administração do sistema Procedimento / Processo de Operações Estandardizadas (Procedimentos de Boas Práticas)		Modificação que foi feito: por quem ? Quando data e versão?
Modulo 1 cooridor: Tabelas:		
Tab 1: Nr por espécie Delegado a: Nome: Email:	relatório acré	
Tab 2: Nr por função económica Delegado a: Nome: Email:	relatório acré	
Tab 3: Nr. Por raça Delegado a: Nome: Email:	relatório acré	
Tab 4: Nr. Por idade a serem Delegado a: Nome: Email:	relatório acré	

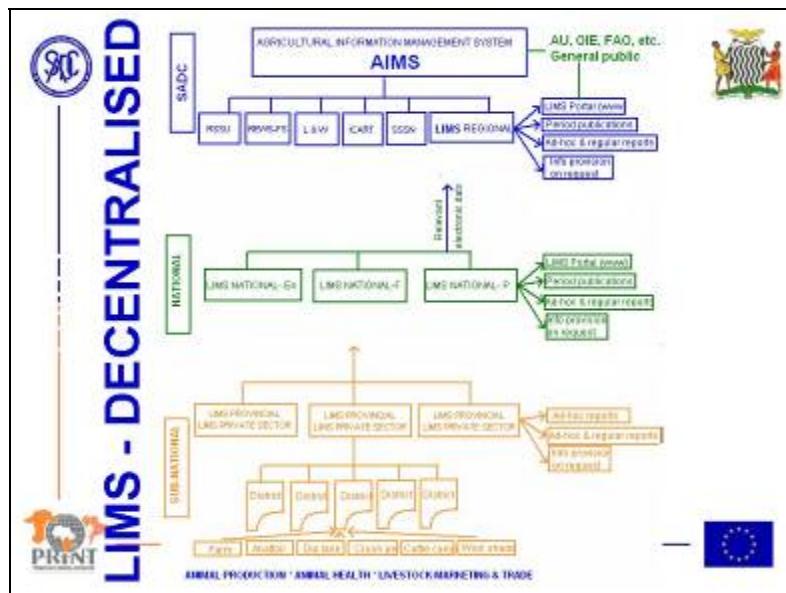
An SoP sheet can be informed indicating the responsibility for this module and template

It is then essential to derive from such diagrams and SoP's (hardcopies) the roles and functions that will be implemented into the database (cf dedicated screens in the Administration Module), therefore giving access to some or all the functionalities and/or modules.

The header of the template also repeats the source of information used.

The person who submits the information should always be indicated into the header of the template and therefore its details should be well described into the database.

Finally the data can be captured into LIMS software



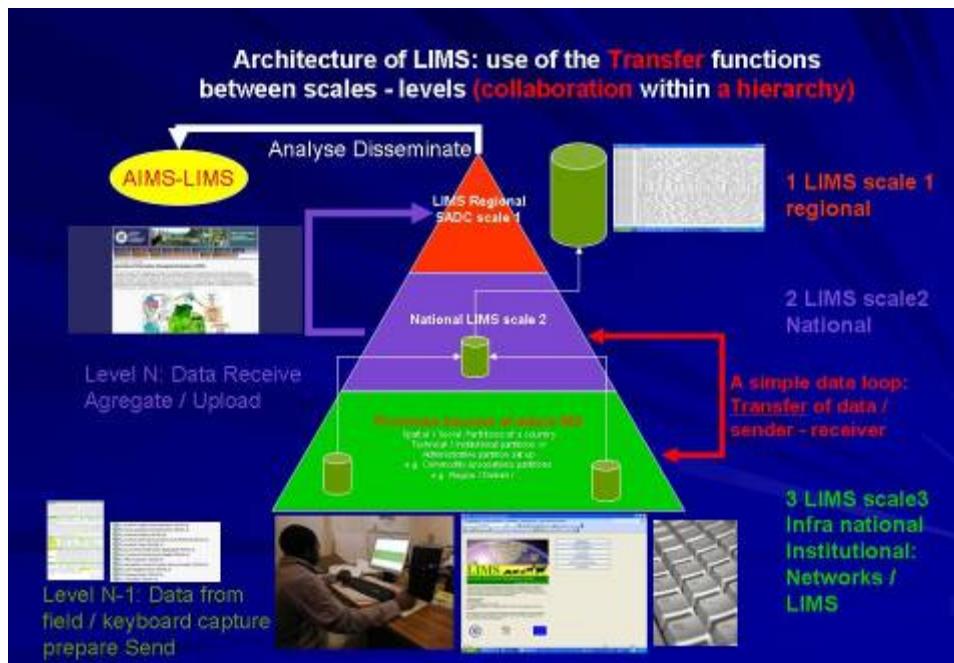
Angola is a decentralized country therefore LIMS should gradually be decentralized

This diagram is a simplified and structured diagram of the potential ways of transferring data within a country and between SADC and countries. All layers cannot be equipped with **computers** or connectivity so far, therefore the use of **excel templates** and **paper report** mimicking the excel templates is also recommended. The use of some **cell phone and mobile Internet (3G modem technology)** should soon facilitate the sending/receiving of some information from a level to another.

Transfer ID	Receive/Send	Partition Type	Partition Level	Partition Name	Serial Number	File Name	Status
MW00000000000001	Receive				1	MW20080730_1.txt	Success

TableName	Inserted	Updated	Duplicates	Errors	Created Date	Created By	Modified Date	Modified By
tblCountryPartitionType	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblCountryPartition	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblRefValueType	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblCountryTown	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblOfficer	2	0	0	0	31/07/2008	admin	31/07/2008	admin
tblRefValue	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblLIMSCountryReport	12	0	0	0	31/07/2008	admin	31/07/2008	admin
tblDocument	0	0	0	0	31/07/2008	admin	31/07/2008	admin
tblHumanPopulation	3	0	0	0	31/07/2008	admin	31/07/2008	admin
tblDataAggregate	27	0	0	0	31/07/2008	admin	31/07/2008	admin
tblSDetail	8	0	0	0	31/07/2008	admin	31/07/2008	admin

The *send and receive data* functionality needs to be compatible and the same in all countries and at SADC level, so that any report sent to SADC secretariat is fully compliant with the structure of parameters implemented in the regional database (compliance of structure). Therefore any change made in one country like adding a given category of product must be reflected in the regional database too in order to be shared with SADC, otherwise it should stay in the national database.



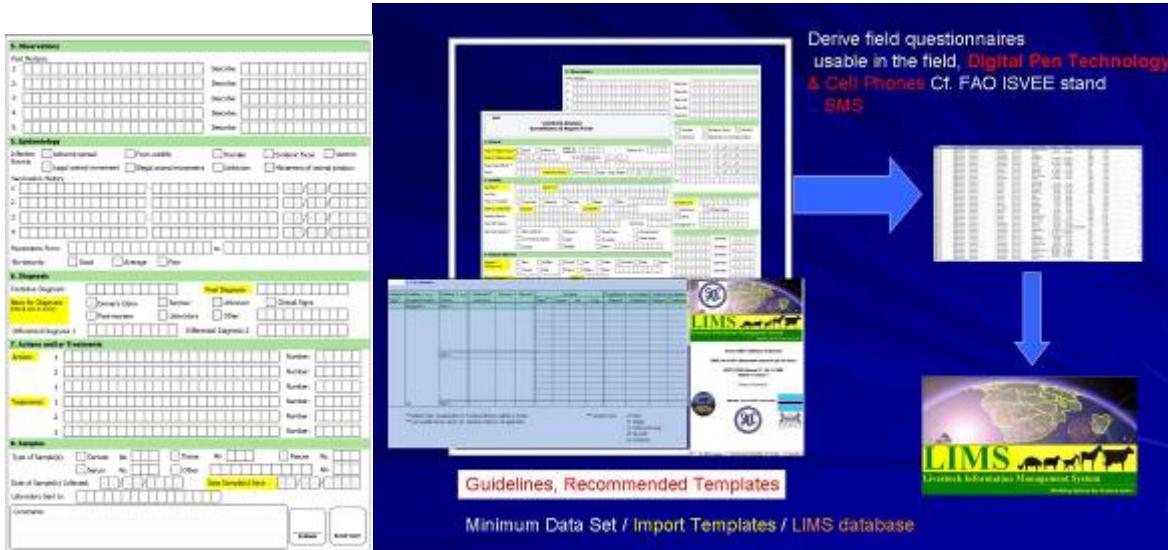
The classic way of using LIMS is to directly type data into the database.

Link to filed questionnaires and Data capture devices like PALM or DPT

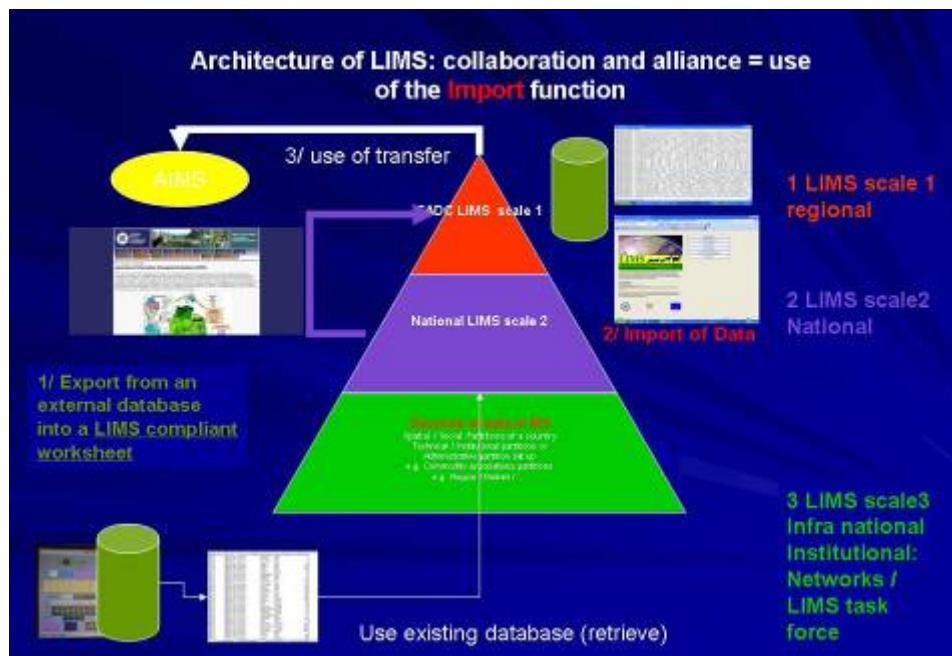
Field survey questionnaires can be derived from the tables to be used in the field at any hierarchical level, for instance linking the system with field data capture devices like Palm PC or the DPT (digital pen) technologies, soon to smart phones equipped with databases.

Some LIMS templates will be used to derive field questionnaires as they will represent the minimum dataset expected to be recorded in MS. In one part of the SoP (see section 3-3) there is a chapter dealing with data capture in the field. As an agreement between **ADB-funded TAD project**, LSU FANR SADC (and PRINT) and FAO, the DPT will be tested with **LIMS Modules 1 and 10 and 11**, as a data capture device in a selected area based with a well established list and names of villages, DipTanks or Crush pens, with a limited number of them (to match the limited number of DPT equipment, may be 5 to be purchased by country given FAO funds available for the component). The area must be representing a limited zone of the country but tactically important for informing disease control, we also suggest they are transboundary zones neighbouring another country beneficiary of the TAD's project.

The conversion of the Template into an adapted DPT Questionnaire is therefore required for better capturing data from the field level by people having only reading and writing skills in the appropriate language (**Portuguese for Angola** and English for the others), therefore usable by community based technicians in the area, and obviously also by DVS trained personnel.



DPT Questionnaire will be derived from the template (minimum data set included): they will be developed for Module 1 (census), Module 10 (disease), and 11 (vaccinations).



Once data captured it can imported using the Import facility of LIMS, the same applies to historical data

Stages recommended for implementing the LIMS in a given country.

In general, we recommend MS be gradually implementing the LIMS, by upgrading **hardware, software and humanware** given a national road map (a business plan specific to the country) taking into account with due respect some **regional milestones** agreed upon at LTC and in sub committees of the LTC.

First stage

Firstly, it is advisable to make an **inventory** of what **data is available** without effort (already available in some institutions being major sources) therefore only requiring a networking exercise.

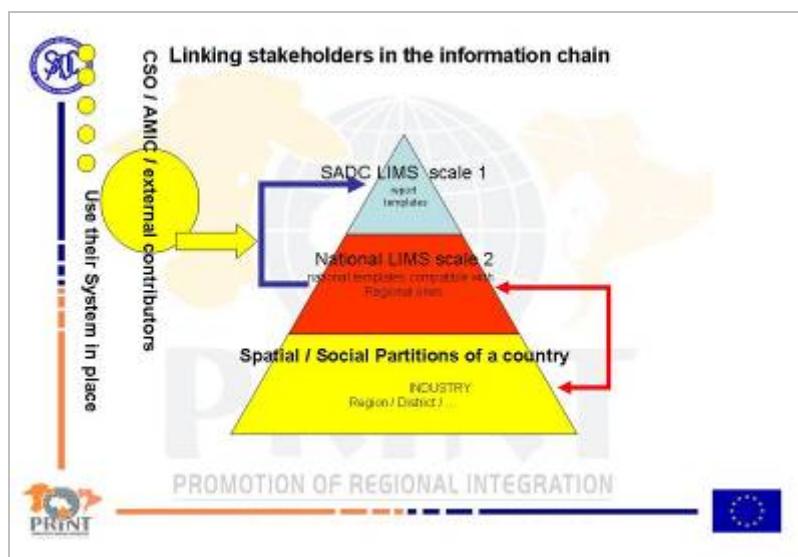
Second stage

Secondly, the system shall be improved by adding information when it will require little effort.

Third stage

A third stage will be when the completion of the data collection which will require significant effort. It is advised to benefit from other project funds, especially when such projects have been tasked to implement an **information system or a monitoring tool** for a part of or the entire Livestock sector.

An important aspect to consider is **HOW** the contributors will send their contribution **WHO** will, **WHEN, WHERE** with which **WHAT** i.e. their dataset (therefore contributing to the LIMS).



Last stage: Contribution and adoption of LIMS procedures, system and tools into other global information chains designed for monitoring the economic development of a country

In some instances, one could insert the LIMS system into a more global system therefore reinforcing it. Here the diagram is highlighting how LIMS can be inserted into the information chain of DEVinfo; all supported by UN, and generally carried out by CSO's in SADC region. These systems are generally weak in capturing indicators and information related to the LS sector. We can actively change this by adopting LIMS as a standard in MS. The same principle applies for chain of information on agricultural statistics that can be sometimes a bit weak on the livestock sector.

Constitution of a LIMS task force

It is recommended that a **LIMS task force** be constituted and that it meets **quarterly**. It can be constituted by MINAG and its relevant departments (ISV GEPE etc..), plus INE, with some

selected private companies or associations from civil society at least (cf list of participants to the LIMS AIMS seminar). Their first task should be to draft the SoP's sheet and agree on procedures

LIMS SoP's Sheet cf annex IV

A SoP sheet has been proposed by PRINT to be used as a guideline when drafting Standards procedures for exchange of information between the various members of LIMS network and sources (such SoP should be designed and improved by MS during their networking exercise).

This sheet shall be used to respond to the questions: **Who** will do **What** regarding LIMS templates and LIMS application? **Why When and Where?** This check list requires firstly the description of all potential actors: Institutions and name of a personnel and its details etc..

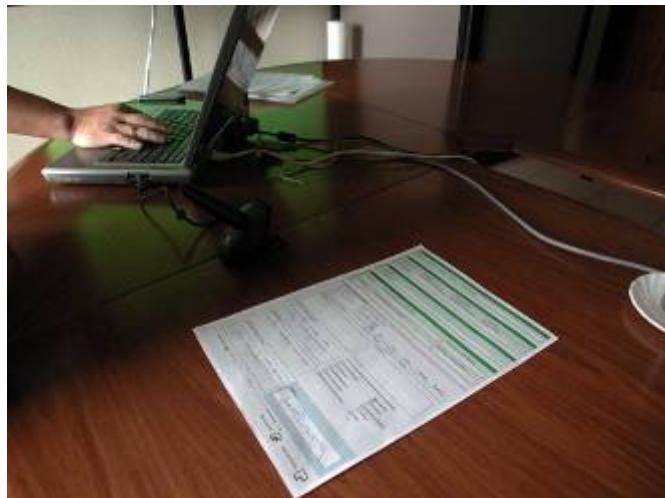
4. Other Topics (than LIMS) discussed during the mission

TAD's project and use of LIMS and hand held devices in Angola (DPT)

In view of making advance on the SADC TAD's project, PRINT has been requested by the FANR LSU to provide guidance concerning the improvement of information provision regarding TAD's related data. It was decided to improve collection of data in the field for census data, outbreak notification and vaccination (M10, M11, M1 fo LIMS), therefore using three modules of LIMS.

Therefore, in one component of the TAD project, FAO who is the implementing agency will be tasked to test the use of DPT (digital pen technologies) or/and other devices (handheld PALM like cell phones) to better collect field data. PRINT could complement the funds by using its own budget and by providing some extra equipment.

We therefore have requested Angola to provide indications on where they would like to start the test with the DPT (the list for selection and survey table is included into the SoP).



Para o projeto AdB TAD é preciso identificar províncias e distritos onde se podem desenvolver uma iniciativa de recolha de dados com médios digitais appropriados DPT pocket PC, ou eeemini laptops por exemplo. Em que distritos podemos começar?

**SADC-TAD AdB funded project / Handheld / DPT Digital pen technology / Handhelds
Try to indicate in which Partitions you would like implementing a Handheld / DPT Digital pen technology connected to LIMS templates and system (three templates of LIMS are selected to be**

the first implemented at grass root level: **Module 1 Census, Module 10 Outbreak and Module 11 Vaccination**).

Country:	Angola
Representativity:	January 2005
Source of the data:	Instituto Geografico e Cadastral de Angola
Source of the codes:	SALB project, Copyright © United Nations 2002-2005. All rights reserved
Comments:	With the agreement of the NMA, the letters of administrative units names containing accents have been changed as follows: é became e, í became i, ú became u, ô became o in order to follow the specifications of the project.

1st administrative level names	1st administrative level codes	2nd administrative level names	2nd administrative level codes Distritos preferidos Para usar o DPT
Bengo	AGO001	Ambriz	
Bengo	AGO001	Bula Atumba	
Bengo	AGO001	Dande	
Bengo	AGO001	Icolo e Bengo	
Bengo	AGO001	Muxima	
Bengo	AGO001	Nambuangongo	
Bengo	AGO001	Pango Aluquem	
Benguela	AGO002	Baia Farta	
Benguela	AGO002	Balombo	
Benguela	AGO002	Benguela	
Benguela	AGO002	Bocoio	
Benguela	AGO002	Catumbela	
Benguela	AGO002	Chongoroi	
Benguela	AGO002	Cubal	
Benguela	AGO002	Ganda	
Benguela	AGO002	Lobito	
Bie	AGO003	Andulo	
Bie	AGO003	Camacupa	
Bie	AGO003	Catabola	
Bie	AGO003	Chinguar	
Etc...			
18 units		163 units	

5. CONCLUSIONS & Way forwards

All the points debated in this report will be soon presented during further sub committees meetings and at the LTC in 2009.

The road map for the way forward shall be decided by MS regarding the development of LIMS in their respective country, by **establishing a 5 years roll out plan for LIMS**. It is expected that almost all MS will be visited by PRINT for the adoption mission before end of 2008 (except RSA and DRC & Seychelles in 2009), missions which are aiming at a first sensitization to the SADC information system. The success of the LIMS relies on the **formation and the activity of national LIMS networks** (human-ware) and on the **collaboration between national institutions** holding information on the LS sector. Therefore, we recommend MS use the SoP's provided for guiding such exercise and convene frequent meetings of the LIMS network.

PRINT will attempt to continue providing its support to MS in 2009 through the CIRAD service contract lasting up to November 2009, whereas the program estimate PE4 of PRINT ends in March 2009. The 5 years rolling plan for LIMS should be ready by then. The support in 2009 will be

devoted to more training on LIMS and AIMS and to the support to MS to form their LIMS network..

Countries are expected to start drafting their **national SoP's** firstly for the 9 quantitative modules (and particularly for M1, M3, M5, M10, M11 on one hand plus M2 and M6 on the other hand) which are considered as priority Modules (in depth priority setting will be discussed during the next Sub committee meetings).

Member states should also **collect and send information** to SADC secretariat (to Livestock unit FANR c/o PRINT LS project), i.e. the last numerical datasets available for these priority Modules. To do so they could use firstly the **templates provided in Excel**, then the **importing Excel formats**, as the use **of LIMS software** (with transfer of the simple ad coded text files) will be heterogeneous and gradually implemented in MS.

They should start by providing data on **M1, M3, M5, M11**, and continue reporting on **M10** which are essential Modules if we want to publish a **production and trade yearbook** plus a **disease control yearbook** by next year 2009. M10 is relatively well advanced because of the historical accumulation of data regarding outbreaks in the region, and a first disease yearbook has already been published.

Thirdly, they should start collecting **retrospective data** to provide elements for a trends analysis (5 years retrospective data to be imported with the import facility).

Annexures / Annexes

ANNEX I – Terms of reference for the mission

TERMS OF REFERENCE FOR PRINT LIVESTOCK PROJECT MISSION ON LIMS Launching in Angola

LIMS Adoption Missions: Stakeholder Consultations & Training: July to December 2008

A major expected output of the PRINT Livestock Project is the development of a Livestock Information Management System (LIMS) for the collection of livestock data, processing and reporting of information between Member States and the SADC Secretariat. LIMS is a component of the SADC/FANR/AIMS i.e. Agricultural Information Management System.

The development of LIMS has necessarily, been undertaken in stages as follows:

- Situation Analyses to establish systems of livestock data management in Member States;
- Consultative workshops on the development of reporting templates for data-capture with Sub Committees of the SADC Livestock Technical Committee, namely:- 1) Epidemiology & Informatics, 2) Animal Production, Veld & Marketing, 3) Veterinary Public Health & Food Safety, and 4) Veterinary Laboratories & Diagnostics;
- Approval of the data-capture templates by the Livestock Technical Committee; and
- Sub-contracting of the LIMS database development.

The LIMS application is now in its final stages of development. The stage has been reached where the LIMS application must be rolled out to Member States for installation, training and final testing, whilst providing an opportunity for establishing institutional networks for livestock data collection at the national level.

To this end, so-called LIMS Adoption Missions to Member States are planned from July to December 2008. Attached is a table giving details regarding the month and proposed dates relevant for each Member State.

The LIMS Adoption Missions will comprise the following activities:

- A stakeholders workshop to present the entire SADC/FANR information strategy i.e. the AIMS portal, the LIMS application, the LIMS Web/GIS, associated reporting templates, national standard operating procedures (SOPs), and the institutional network for implementation;
- Training of trainers on the LIMS application for a limited number of key personnel who will conduct further training at national level;
- A final evaluation of sources of information and use of the harmonized data-capture templates;

Therefore member(s) of the PRINT Livestock Project will firstly hold a one-and-a-half day workshop whose participants should include representatives of livestock departments, public and private institutions who are a source of livestock data and / or information, including all livestock personnel who have participated in previous workshops or training courses organized by the project as well as selected participants to recent AIMS workshops.

The one-day workshop will be followed by a three-day LIMS training course of a maximum 8 identified personnel involved in livestock data management.

Please note that there will be follow-up communication with each Member State close to the date of the mission. The PRINT Livestock Project will meet all costs associated with the above-mentioned activities i.e. per diems, travel and workshop facilities.

We look forward to your usual support in this important regional activity.

Yours Sincerely,

Dr. Welbourne Madzima
Project Coordinator
PRINT Livestock Project

ANNEX II – CD (electronic annexes):

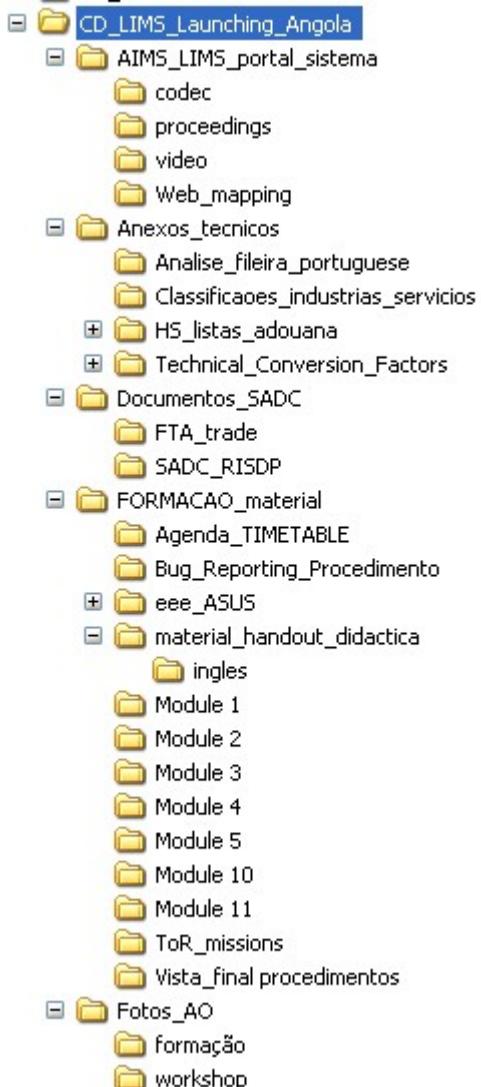
Software's released at per the date of the training (Beta version still under evolution): LIMS beta version

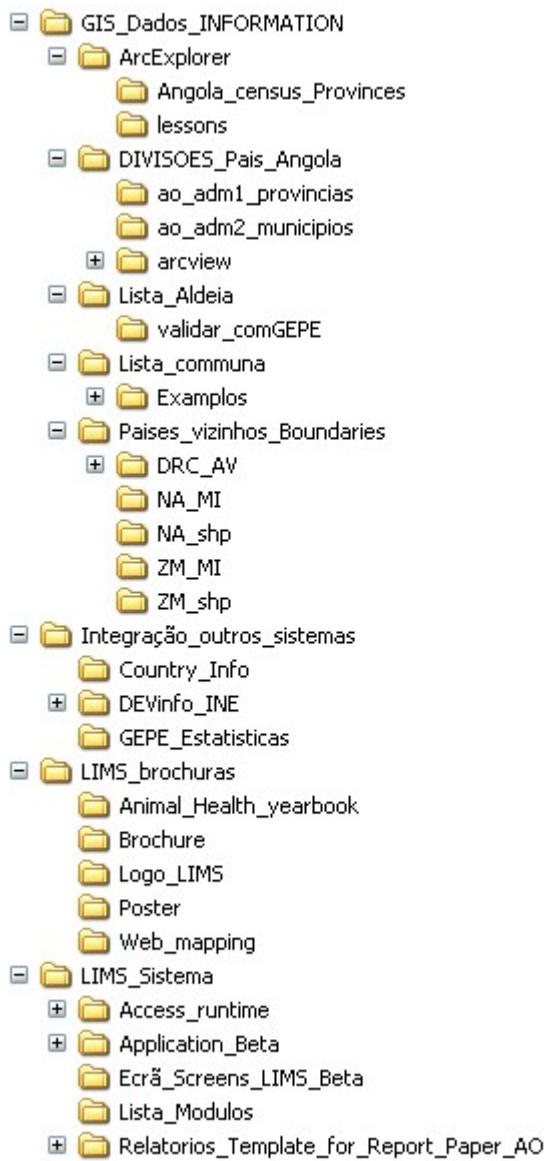
Arc-Explorer XP (Java required)

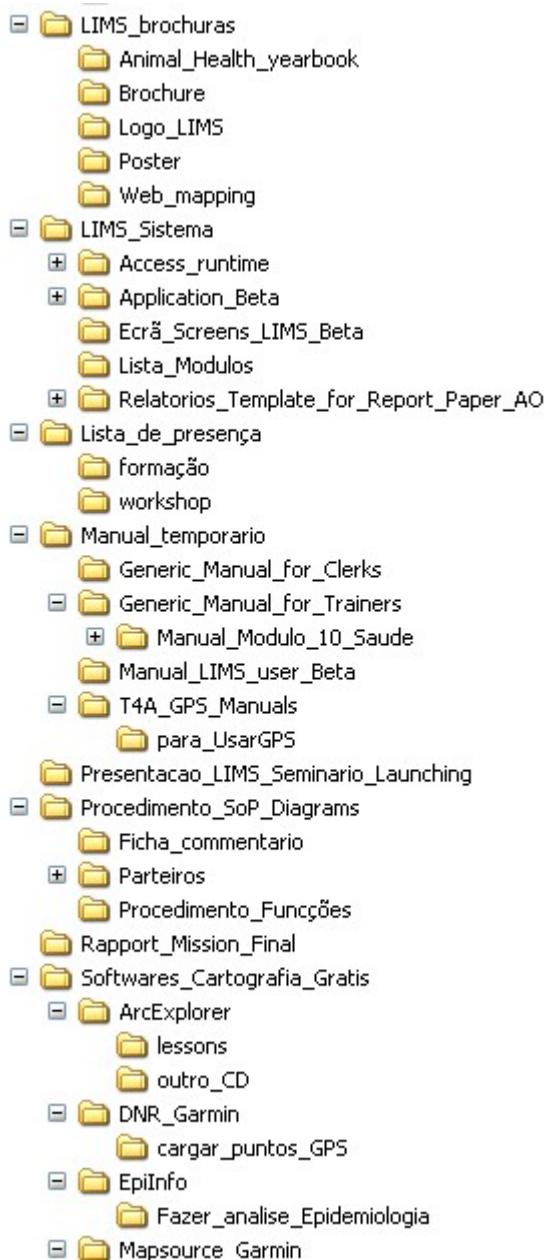
CODEC to read movie for the AIMS demo video (in file .avi)

LIMS Templates in Excel (version Beta to date)

Listing of Administrative and technical Partitions in Excel







ANNEX III – Presentation made at the Launching seminar

In the CD

ANNEX IV – Proposed SoP and comment sheet (excerpt to be improved by MS)

a/ SoP sheet

Procedimento / Processo de Operações Estandardizadas (Procedimentos de Boas Praticas)



LIMS Standard Operating Procedures SoP

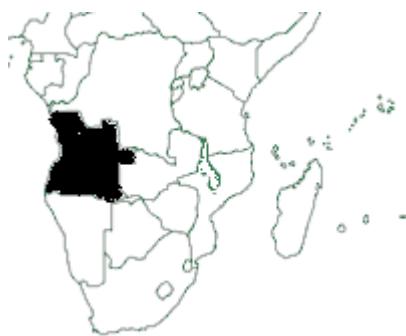
LIMS sistema de estatisticas para o sector da pecuaria da SADC

Procedimento / Processo de Operações Estandardizadas (Procedimentos de Boas Praticas)

SoP ‘elaboration Sheet for a module or some excerpts of a Module (template) (to complement the LIMS Comment sheet)

Ficha de Elaboração do Procedimento SoP por modulo tipo do LIMS (ou por relatorio Excel extractado de um modulo). Tambem preenche a ficha de comentarios do modulo.

Pais da SADC / Country: **Angola**



Preamble / Preâmbulo

This sheet is elaborated to respond to the question: Who will do what regarding LIMS templates and LIMS application, why when and where? (Institution and name of a personnel and its details etc..)?

Esta ficha esta elaborada para responder nas questões seguintes: usando o sistema LIMS (relatorio Excel ou o software) Quem vai fazer O que?, Por que? Quando? e Onde? Que instituição sera implicada? Que pessoal? Etc..

O Objectivo e a finalização gradual dos SoP's de cada modulo do LIMS para um pais Estado Membro da SADC, e para segurar o desempenho gradual das funções do LIMS. Precisamos usar o rede de actores do LIMS. Então os participantes ao sistema têm funcções específicas que são descritos na ficha SoP, por exemplo:

- Ser um membro do rede LIMS que se encontra frequentemente (participar nas reuniões)
- Ser um lider para um modulo particular e ter a responsabilidade deste modulo ao nível correspondente: contribuir com os dados exigidos, e comunicar estas informações no parceiro “parente” (SADC, nível nacional etc.) quando e necessário (cf. frequencia exigida por o modulo do LIMS),
 - Usando os relatorios Excel (electrónico ou papel)
 - Ou usando o software LIMS (ecrã para a digitação e ficheiro produzido por o software)

- Fazer a coordenação para a digitação, antes da transmissão dos informações na SADC (FANR Livestock unit)
 - Transmtir o relatorio completo e consolidado de dados na SADC
- Utilizar os recursos “on line” disponibilizados nos sitios Internet da SADC, como carregar (baixar) os novos ficheiros das novas versões dos manuais, ou do software quando são disponíveis no sitio LIMS da SADC (portal) <http://aims.sadc.int> / <http://lims.sadc.int>
 - Fazer regularmente a revisão dos SoP’s do LIMS (com o rede LIMS)
- Ser um formador nacional (ou regional) sobre o sistema LIMS, usando os manuals genéricos e participar na edição de paragrafos e manuais específicos e úteis para o país
- Usar o portal interactivo AIMS da SADC e colocar informações pertinente por o secto da pecuaria (noticias, factos..)

*The objective is to develop and gradually finalize the **National and Specific LIMS SoP’s** in the country: SoP, i.e. **standard operating procedures** for running the LIMS system, therefore using a **national network of stakeholders** (with their names and positions) which will have **FUNCTIONS** regarding data contribution and use of the system, such as:*

- Be part of the LIMS national Taskforce
- Take responsibility and leadership to provide data (contributors as **primary of secondary sources**) and submit dataset to “parent” partner (could be SADC, MINAG...)
 - fill some templates
 - enter data into screens of LIMS application
- Coordinate the data capture and the submission to SADC
 - Submit to SADC
 - Download the new versions of LIMS application and training material (manuals) when released and
 - Revise the national SoP’s regularly (yearly)
- Act as a Trainer on LIMS using generic manuals and update some by drafting country specific contents (to customize them for national purpose)
- Interact on the AIMS LIMS portal: use and contribute to the portal, participate to the AIMS national network

Essa actividade sobre os SoP’s esta necessario para:

- Iniciar a transmissão de dados a partir dos pais membros ate o secretariado da SADC
 - Usando os relatorios Excel ou
 - Usando as funcionalidades disponíveis no software MS Access

This activity is also to assure:

1/ the starting of the data reporting from the date of the visit to MS (firstly using LIMS templates and preparing the compilation of datasets)

- by using **TEMPLATES in EXCEL** if you cannot use the application for some reasons, or if you wish to use the excel templates in hard and soft copies in the field (at province and district levels)
- by using **LIMS application**, you will also follow up updates of new versions on the LIMS AIMS portal (cf. pastas de arquivo) <http://aims.sadc.int> / <http://lims.sadc.int>

Por isso é necessário:

- Identificar os varios actores que se candidatam por uma participação activa no rede LIMS
 - Estabelecer uma lista dos contributarios potenciais, = das fontes primarios e secundarios de dados
 - Identificar quem tem prioridade na lista para reduzir a lista, distribuir as funções essenciais, e ter finalmente um numero minimo de participantes no rede LIMS

This needs to clearly:

- **Identify and list the various ad potential source(s) of information / type of data that they could provide / should manage, when and where data are available and publicly published** (.i.e. sources like web sites or in institutions where data are managed by experts).
 - **Prioritize and Select** sources that will contribute to the system and start dispatching the roles and functions: list them firstly so that one will be selected to report

2/ em segundo lugar um outro objectivo sera de iniciar a colheita de dados por ao minimo um ano de dados detalhados e recente demais, usando os relatorios Excel do LIMS (os modulos sobre o sector da pecuaria), para preparar os elementos duma politica regional agro pecuaria da SADC que já esta discutada

*2/ the second goal is also to start in depth collection of at least **one year of detailed data** in hard or electronic copies (in order to properly prepare various meetings like the LTC and the RAP Policy workshop where data will be used), (electronic files are preferred)*

3/ em terceiro lugar, o outro objectivo sera de iniciar a colheita de dados dos cinco anos passados antes da ano de referencia, usando os relatorios Excel do LIMS (os modulos sobre o sector da pecuaria), para melhorar os argumentos duma politica regional agro pecuaria da SADC, fazer uma analise de tendênciia etc.. Assim INE e o MINAG podem todos os fornecer os dados que eles têm.

*3/ thirdly to start process of collecting elements for a “5 years data retrospective time series” in hard or electronic copies as well (in order to properly prepare trends analysis)
(Particularly ask NSO to provide all relevant documents (possibly purchased for PRINT))*

SoP LIMS for Country = Angola For a Component or a Module or Templates / Screens

Liste des Modules et écrans (rapports types Excel) correspondants au système LIMS / *Lista dos Modulos e ecrã (relatorios tipo Excel) do LIMS / List of Modules and screens (SADC Harmonized templates) of LIMS*

- Headers / Timbre / Entête
- Module 1 *Numbers & Composition of Herds* / Effectivos animais do rebanho nacional / Effectifs nationaux – recensement animal
 - 1. *Nr by species* / effectivos animais por espécies / Nombre par espèce
 - 2. *Nr by economics* / effectivos animais por função económica / Nombre par fonction économique
 - 3. *Nr by breeds* / Effectivos animais por raça / Nombre par race
 - 4. *Nr by herd structure* / Effectivos animais por idade e sexo / Nombre par âge et sexe (démographie)
- Module 2 *Human Households & Population in Livestock farming* / Agregados familiares criadores / Ménage engagés dans l'agriculture et l'élevage
 - 1. *Human Population* / Agregados familiares / Ménages et population humaine
- Module 3 *Production Parameters* / Produção animal / Production animale
 - 1. *Slaughter* / Abate (carne) / Abattages
 - 2. *Milk* / Leite / Lait
 - 3. *Dairy products* / Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides, skins* / Curos e Peles / Cuirs et peaux
- Module 4 *Livestock & Products Price* / Preços dos productos animais / Prix des produits d'élevage et animaux vivants
 - 1. *Live animals* / Animal vivo / Animaux vivants
 - 2. *Meat products* / Producto de carne / Produits carnés
 - 3. *Milk products* / Leite e Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides & skins* / Curos e Peles / Cuirs et peaux
 - 6. *Fiber & feathers* / Fibras e plumas / Fibres animales et plumes
- Module 5 *Livestock & Products trade: import/export* / Importação e Exportação / Import et Export
 - 1. *Live Animals* / Animal vivo / Animaux vivants
 - 2. *L. stock Products* / Producto animais / Produits d'élevage
 - 3. *L. stock Inputs* / Inputs / Intrants de l'élevage
- Module 6 LS *Infrastructures* / Infra-Estructuras / Infrastructures

Generic Partitions / Divisões do pais / Divisions du pays

- 1. *Administrative* / Administrativa / Administratives
- 2. *Technical* / Tecnico / Techniques

Infrastructures Agreg. / Infra-Estructuras Agregados / Infrastructures description agrégées

- 3. *Dipping* / Tanque banheiros / Bain détiqueur
- 4. *Pens* / currais / Enclos de vaccination

- 5. *Vet clinics / Clinicas vet. / Cliniques vétérinaires*
- 6. *Govt Offices / Officios do governo / Bureaux de l'état*
- 7. *Mun Abattoirs & slabs / Matadouros municipais e locais e casas de matança / Abattoirs locaux et tueries*
- 8. *Milk Collection / Recolha de leite / Récolte de lait liquide*
- 9. *Livestock Markets / Mercados / Marchés*
- 10. *Storage Products / Armazens / Entrepôts et Stocks*

Infrastructures Detailed / Infra-Estructuras detallados / Infrastructures détaillées

- 1. *Vet Diagnostic Labs / Laboratorios / Laboratoires de diagnostic*
- 2. *Vet Vaccine Labs / Productores de Vacinas / Producteurs de vaccins*
- 3. *Industrial Abattoirs / Matadouros industrias / Abattoirs industriels*
- 4. *Dairy Processing Plants / Usina de transformação de leite / Unité de transformation laitière*
- 5. *Secondary Markets, / Mercados secundarios / Marchés secondaires*
- 6. *Port of Entry & Exit / Portos de entrada e saída / Postes d'inspection en frontière PIF*

- Module 7 *Meat Inspection / Food safety / Segurança Sanitaria dos alimentos / Sécurité sanitaire des aliments*
 - 1. *Ante-mortem / Inspecção ante mortem / Inspection ante mortem en abattoir*
 - 2. *Post-mortem / Inspecção post mortem / Inspection post mortem en abattoir*
- Module 8 *Livestock Associations and Service Providers / Associações de criadores e fornecedores de servicios / Association d'éleveurs et fournisseurs de services*
 - 1. *Umbrella org & assoc / Associações / Associations et Confédérations*
 - 2. *Private companies / Privado / Secteur privé*
 - 3. *Government / Publico / Secteur public*
- Module 9 *LS related Laws, Regulation and Acts, policy docs / Legislação e politicas agro pecuaria / Législation et documentsd e politique sur le secteur élevage*
 - 1. *National Docs / Nivel nacional / niveau national*
 - 2. *International Docs / Niveis internacional e regional (SADC) / Niveau international ou sous régional (SADC)*
- Module 10 *Disease Outbreak notification / Notificação dos surtos de doenças / Information sanitaire notification d'épidémies animales*
 - *Outbreaks / Epidemias focos / Foyers d'Epizooties animales*
- Module 11 *Vaccinations (e.g. TAD's) / Vacinação / Vaccinations*
 - 1. *Vaccination / vacinações efectuadas / Vaccinations effectuées (prophylactique et de contrôle)*

Part 1: Header / Timbre

Date of elaboration of the SoP: / Data de elaboração da ficha

Persons who elaborated the SoP: / Pessoas que elaboravam a ficha
(details and email of contact person for the modification requested):

SoP e por o modulo numero ?: Titulo e numero do relatorio o do ecrã?

SoP for which Template Number & Screen number: (code : Component - Module - and Template Number / Screen number from left to right when possible to account like this)

Part 2: *Images (when needed) / Imagem do ecrã o do relatorio*

Template / relatorio tipo Excel

e.g. Module 3, Template 4 / Screen 4 (with header accounted for)

4. Processed Dairy Products (from all species)												
Partition 1, e.g. Region/Province	Partition 2, e.g. District	Pasteurized milk Lt**	UHT milk Lt	Fermented milk Lt	Yoghurt Lt	Cheese Kg**	Butter Kg	Cream Lt	Powder milk Kg	Other* products	Other * products	Other * products
Reg/prov 1.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
Reg/prov 2.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
etc												

* Specify which product
** Lt= Litres, Kg= Kilograms

LIMS gives option for cattle and goat = wrong
LIMS: take out option "milk"
Not in LIMS: fermented milk, cream, other products
LIMS: Yoghurt/fermented products together

3.1. Processed Dairy Products from Cattle

Produtos leiteiros (lacticínios)

Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	logurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1....										
		Dist 2....										
		Dist 3....										
etc												

* Specify Administrative or Technical boundaries (admin or techn)

** Specify which product

3.2. Processed Dairy Products from Goats

Divisão Tipo*	Divisão ao nível 1, e Região/Província	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	logurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1....										
		Dist 2....										
		Dist 3....										
.....	Reg/prov 2.....	Dist 1....										
		Dist 2....										
		Dist 3....										
etc												

Corresponding Screen / Ecrã que corresponde

LIMS - [frmLiveStockProductsMain]

Administration Livestock Development Animal Health Animal Production Livestock Trade and Marketing Tapez une question

Livestock Products

Country: Malawi Year: 2005
Period: January Officer: Chirambo Date Of Report: 22/06/2008 Date of Submission:

Country	Year	Period
Malawi	2005	January

Report Header Animal Slaughtered & Meat Produced Milk production & Milk processed Dairy Products processed Eggs Hides,Skins,Fibre & Feathers

Records Selection

Partition Type	Product Category	Partition Type	Partition Level	Partition Name	Species	Product
Administrative	1	Central	Cattle	Fermented Milk/Yoghurt		
Administrative	1	Central	Cattle	Cheese (Hard)		
Administrative	1	Central	Cattle	Butter		
Administrative	1	Central	Cattle	Powder Milk		
Administrative	1	Central	Goats	UHT Milk		

Partition Partition Name Quantity Unit of Measure Equivalent Milk Date Created Created By Date Modified Modified By
Level Liters

Mode Formulaire FILT NUM

Livestock Information Management System - [frmLiveStockProductsMain]

Administration Animal Production Livestock Marketing and Trade Livestock Development Animal Health Tapez une question

Produção Animal

País : Officer :
Ano : Data do relatório :
Período : Data da Apresentação :

Participação	Administrativa	Categoria de Produto	Partition Type	Partition Level	Partition Name	Species	Product
Nível Participação	Espécie						

Cabeçalho do Relatório Animais abatidos e carne produzida Produção leiteira e laticínios transformados Produtos Leitaria transformados Ovos Couros, peles e penas

Seleção Records

Tipo de participação	Administrativa	Categoria de Produto	Partition Type	Partition Level	Partition Name	Species	Product
Nível Participação	Espécie						

Nível Partição Nome Partição Quantidade Unidade de Medida Equivalente leite litros Data da criação Criado por Data da atualização Modificado por

Mode Formulaire FILT NUM

The screens are in three languages, e.g. infrastructures Module 6 (though some editing will be required)

Infrastructure Details

	<p>Country: Malawi Period: Full Year Officer: Chirambo</p> <p>Year: 2005 Date Of Report: 02/07/2008 Date of Submission:</p>																				
<h3>Détails sur les infrastructures</h3> <p>Report Header Veterinary Laboratory</p> <table border="1"> <tr> <td>Partition Type</td> <td>Administrative</td> <td>Pays: Malawi</td> <td>Année: 2005</td> </tr> <tr> <td>Partition Level</td> <td>2</td> <td>Période: Toute l'année</td> <td>Date du rapport: 02/07/2008</td> </tr> <tr> <td>Partition Name</td> <td>Blantyre</td> <td>Agent responsable: Chirambo</td> <td>Date of Submission:</td> </tr> <tr> <td>Town Name</td> <td>Blantyre</td> <td></td> <td></td> </tr> <tr> <td>Facility Name</td> <td>Blantyre P</td> <td></td> <td></td> </tr> </table> <p>Rapport tête Laboratoire vétérinaire Abattoir industriel Vaccins vétérinaires et industrie du médicament vét</p>		Partition Type	Administrative	Pays: Malawi	Année: 2005	Partition Level	2	Période: Toute l'année	Date du rapport: 02/07/2008	Partition Name	Blantyre	Agent responsable: Chirambo	Date of Submission:	Town Name	Blantyre			Facility Name	Blantyre P		
Partition Type	Administrative	Pays: Malawi	Année: 2005																		
Partition Level	2	Période: Toute l'année	Date du rapport: 02/07/2008																		
Partition Name	Blantyre	Agent responsable: Chirambo	Date of Submission:																		
Town Name	Blantyre																				
Facility Name	Blantyre P																				
<h3>Infra-estrutura Detalhes</h3> <p>Le type de partition Niveau de partition Le nom de la partition Nom de la ville Nom de l'établissement</p> <table border="1"> <tr> <td>Tipo de partição</td> <td>Administrativa</td> <td>País: Malawi</td> <td>Ano: 2005</td> </tr> <tr> <td>Nível de divisão</td> <td>2</td> <td>Período: Ano completo</td> <td>Data do relatório: 02/07/2008</td> </tr> <tr> <td>Nome Partição</td> <td>Blantyre</td> <td>Agente responsável: Chirambo</td> <td>Date of Submission:</td> </tr> <tr> <td>Nome Cidade</td> <td>Blantyre</td> <td></td> <td></td> </tr> <tr> <td>Facilidade Nome</td> <td>Blantyre Pharmaceutical Ltd</td> <td></td> <td></td> </tr> </table> <p>Relatório Cabeçalho Laboratório Veterinário Matadouro Industrial Vacinas Veterinários e industria do medic.</p>		Tipo de partição	Administrativa	País: Malawi	Ano: 2005	Nível de divisão	2	Período: Ano completo	Data do relatório: 02/07/2008	Nome Partição	Blantyre	Agente responsável: Chirambo	Date of Submission:	Nome Cidade	Blantyre			Facilidade Nome	Blantyre Pharmaceutical Ltd		
Tipo de partição	Administrativa	País: Malawi	Ano: 2005																		
Nível de divisão	2	Período: Ano completo	Data do relatório: 02/07/2008																		
Nome Partição	Blantyre	Agente responsável: Chirambo	Date of Submission:																		
Nome Cidade	Blantyre																				
Facilidade Nome	Blantyre Pharmaceutical Ltd																				
<table border="1"> <tr> <td>Tipo de partição Nível de divisão Nome Partição Nome Cidade Facilidade Nome</td> <td>Administrativa 2 Blantyre Blantyre Blantyre Pharmaceutical Ltd</td> <td>Propriedade Latitude Longitude Certificado ISO Data da última a Modificado por</td> <td>Private -12.54363 32.92726 <input checked="" type="checkbox"/> 13/07/2008 admin</td> </tr> </table>		Tipo de partição Nível de divisão Nome Partição Nome Cidade Facilidade Nome	Administrativa 2 Blantyre Blantyre Blantyre Pharmaceutical Ltd	Propriedade Latitude Longitude Certificado ISO Data da última a Modificado por	Private -12.54363 32.92726 <input checked="" type="checkbox"/> 13/07/2008 admin																
Tipo de partição Nível de divisão Nome Partição Nome Cidade Facilidade Nome	Administrativa 2 Blantyre Blantyre Blantyre Pharmaceutical Ltd	Propriedade Latitude Longitude Certificado ISO Data da última a Modificado por	Private -12.54363 32.92726 <input checked="" type="checkbox"/> 13/07/2008 admin																		

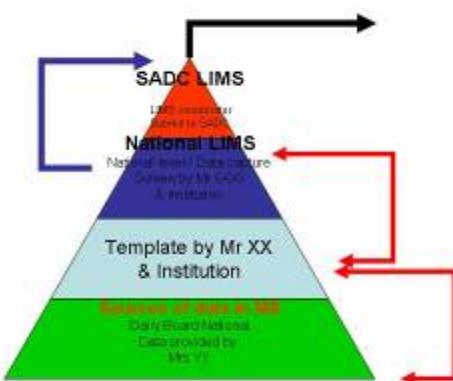
Part 3: Comments on who could / will be responsible for the templates / screens of the module studied. List all potential sources of information for the Module / Template / Screen

Quem sera responsável para o modulo inteiro, ou para um relatorio/écran particular?

Establecer a lista de fonte de dados, a lista de pessoais responsáveis por o tema, a lista dos instituições com uma função hierarquica ou outra sera util neste caso, e escolher as pessoas responsaveis por o modulo/relatorio-ecrã

List them: e.g. hierarchical role of MINAG departments and Partnership / Functional role of other institutions (PPP, CSO, Agric Stats...)

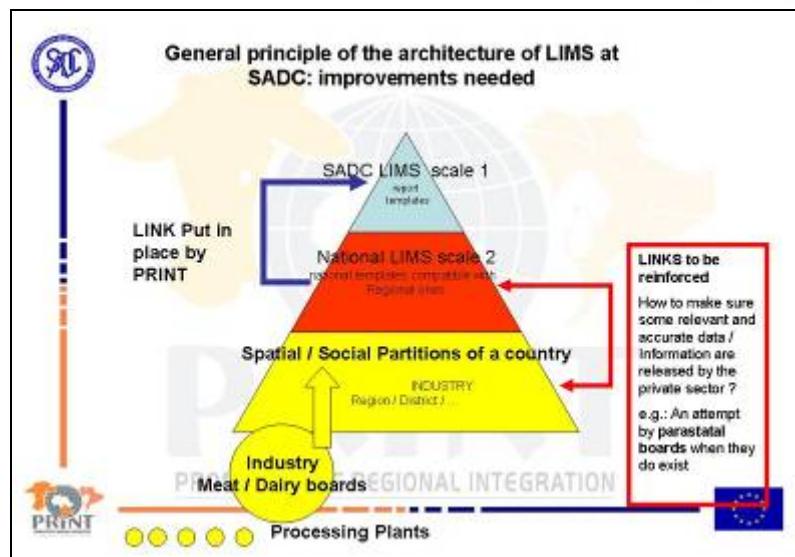
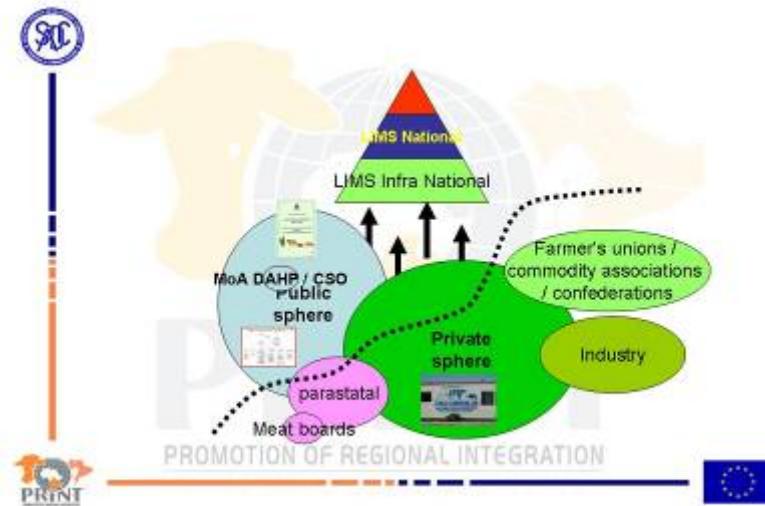
e.g. função hierarquica / **Hierarchical role: how the information will flow from fields to HQ of MINAG**



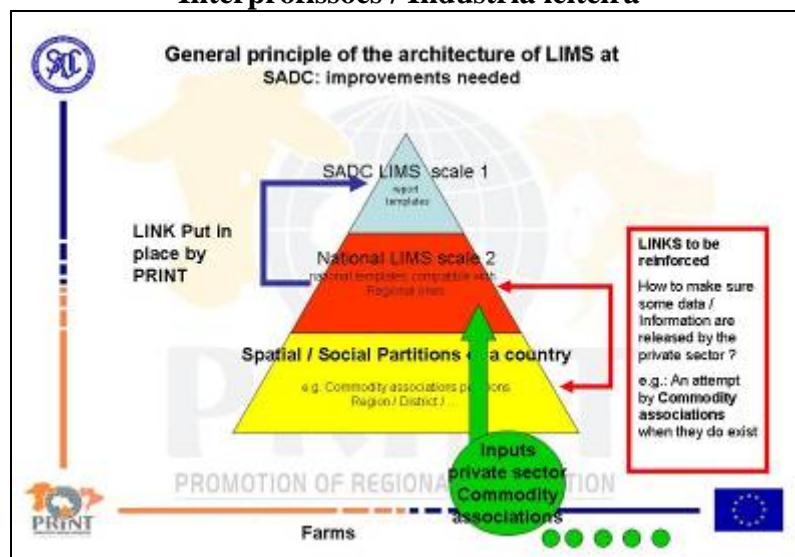
LIMS Module 3 / Template - Screen Dairy ##

e.g. Instituição com uma função não hierarquica / Tipologia dos actores que podem haver uma função no rede LIMS / Functional role: Which institution within or outside MINAG could take

a role , have a function regarding this template? Do they cover the entire territory? Therefore, should they report to HQ or to province / district? etc..



e.g. a dairy board having national coverage may report to HQ where LIMS is installed / Interprofissões / Industria leiteira



e.g. a commodity association having provincial coverage may report to HQ or to the province where LIMS is installed / Associações de criadores

Selection: rank the players / arranjar e seleccionar(escolher) os actors principais

a/ Major Role for this template to be distributed firstly to: / O responsivel para o modulo sera ?

1/

2/

3/

b/ Describe role and responsibility / E descreva as funções e as responsabilidades

1/

2/

3/

Part 4: Diagram for SoP / Flow Diagram / diagramo de fluxo de dados entre instituições (usa uma imagem digital)

i.e. take an image of what you have drafted on a flip chart flow of data between partners, type of transfer, who does what?

Functions to be achieved: / descreve as funções

Etapa 1 / Stage 1: e.g. collection and capture of data / recolha de dados e digitação

- *Collection into paper report from field stakeholders? (can be by the private sector) / recolha com relatorio papel*
- *Collation into Excel templates (compile report in hard copy when needed) / recolha com relatorio electronico*
- *Data capture into LIMS screens / digitação no ecrã*

Quem é responsável para a função descrita ? ex: recolha de dados

Who is responsible for filling the paper report / template / capturing data into LIMS application' screens

- **Nome da pessoa / Name of stakeholder(s) and Institution(s) of reference at national level**
- **(email of contact person)**
- **Nome da instituição provincial / Name of Institution(s) of reference at regional/provincial level**
- **Nome da instituição do distrito / Name of Institution(s) of reference at district level**

Functions to be achieved:

Etapa 2/ Stage 2: e.g. Supervision and submission / supervisão e transferência de informação

Controlo e verificação de qualidade de dados

Data quality control by supervisor / Data submission control to upper scale / level (which one HQ province etc..?) and to SADC (or any person and level e.g. HQ in the MS)

Quem é responsável para a função descrita ? ex: a transferência de dados na SADC

Who is responsible for coordinating this module? = Who is responsible for **coordinating the completion on time, **submitting to SADC** this set / component / module?**

- **Nome da pessoa / Name of stakeholder(s) and Institution(s) of reference at national level**
- **(email of contact person)**
- **Nome da instituição provincial / Name of Institution(s) of reference at regional/provincial level**
- **Nome da instituição do distrito / Name of Institution(s) of reference at district level**

Processo para fazer uma seleção dos actores e a organização do manejo de dados / *How to formulate responsibility in the SoP*

e.g. Fazer a lista dos actores fonts de dados / *LIST of players potential contributors (primary or secondary sources if data and information)*



Organizar o diagrama de fluxo entre os instituições / *ORGANIZE FLOW of DATA between players*



Indicar Que tipo de ferramenta são usados nas etapas : ex: relatorio papel, electronico, ecrã do software, ficheiro de transferência / *Diagram of REPORT USING TEMPLATES or ELECTRONIC FILE + DIRECT input into LIMS Screen*



Part 5: Rank the difficulty of this module / screen / template

Como dificil e a implementação deste modulo/ relatorio?

- **Facil / Y/N Easy to fill with little effort:**
- **Facil com algum esforço / Y/N Relatively Easy to fill with significant effort:**
- **Não e Facil e já necessite esforço e desempenho gradual com tempo/ Y/N To gradually fill with strong effort:**

Part 6: E possivel integrar este modulo do LIMS num sistema de informação que se existe já em Angola? / Y/N

Can this Module/ Template be integrated in another Information system IS (from CSO, , Pesquisa, EWS-SAHIIMS, etc..):

e.g. DEVinfo, VACinfo, EWS systems, M and E Systems etc..

Part 7: Conclusão : decisão de responsabilidade/ In conclusion SoP Decision Table (to be consolidated for all modules)

5 W : Que fazer? Quando? Quem faz? Onde? Por Que? What to do / when where who why??

Tente preencher um quadro deste tipo- modelo / After having elaborated the diagram, try to fill in the following summary table

What action Que acção?	Who Quem?	When Quando?	Where Onde?	Why Por Que?	How Como?
Numero do modulo – ecrã- relatorio? Module Number Screen / template number					
Função esperada? Recolha dados por o modulo M3 relatorio – ecrã Leite so e.g. provide data for module M10 / screen S2 / template T2 be specific ou mandar na SADC o modulo mensal M4 dos preços or e.g. submit to	Institution and name of a person and his expected functions, possibly an alternate when on leave or on mission	Frequency of action	From MINAG National level HQ	This is the best source	Use of LIMS application Or using TEMPLATES in EXCEL

SADC or transfer data from INE to MINAG					

Note:

If needed List the various sources by order but indicate which one is the one used

- Primary source: Institution & Person in charge for the template in Module
- Secondary source: Institution & Person in charge for the template in Module

Example of function (what to do): Institution that will enter data into LIMS, Institution who will submit data into LIMS: Frequency of submission

Part 8: Como fazer o desempenho da instalação do LIMS no territorio nacional inteiro, usando divisões officiais ou tecnicais do pais? How to gradually implement the LIMS in the entire territory with its hierarchy Comments on Hierarchical partition

Hierarchical partitions / divisões administrativas

Provinces / provincias

Besides the official administrative boundaries the LS services are organized in **provincial** services, **municipe** services (with staff from level of technico medio), which could be grouped into **zonas pecuarias** (development zones for LS), and then **communas** (**mataba** = 5 comunas), and **formações sanitarias** (there should be at least one formação sanitaria (health post) per municipe, which comprises some facilities: one **tanque banheiro** / dip tank, one crush pen, plus loading ramp and one scale).

Districts / distritos

Em quem divisão podemos tentar installer LIMS para comecar?

Try to indicate in which Partitions you should start implementing LIMS system with:

- a/ com o software instalado / **LIMS application** installed on computers or/and
- b/ com Relatorio papel e Excel / **Paper Report + Excel sheet (template)**
- c/ Rede de actors bem preparado e formeado / **Network of partners well aware and SoP's developed**

Table: Official coding scheme to be used in Geocoding LS datasets, admin1 and 2. (source WHO IGCA 2005)

Country:	Angola
Representativity:	January 2005
Source of the data:	Instituto Geografico e Cadastral de Angola
Source of the codes:	SALB project, Copyright © United Nations 2002-2005. All rights reserved
Comments:	With the agreement of the NMA, the letters of administrative units names containing accents have been changed as follows: é became e, í became i, ú became u, ô became o in order to follow the specifications of the project.

1st administrative level names	1st administrative level codes	2nd administrative level names	2nd administrative level codes
Bengo	AGO001	Ambriz	AGO001001
Bengo	AGO001	Bula Atumba	AGO001002
Bengo	AGO001	Dande	AGO001003
Bengo	AGO001	Icolo e Bengo	AGO001004
Bengo	AGO001	Muxima	AGO001005
Bengo	AGO001	Nambuangongo	AGO001006
Bengo	AGO001	Pango Aluquem	AGO001007
Benguela	AGO002	Baia Farta	AGO002001
Benguela	AGO002	Balombo	AGO002002
Benguela	AGO002	Benguela	AGO002003
Benguela	AGO002	Bocoio	AGO002004
Benguela	AGO002	Catumbela	AGO002005
Benguela	AGO002	Chongoroi	AGO002006
Benguela	AGO002	Cubal	AGO002007

Benguela	AGO002	Ganda	AGO002008
Benguela	AGO002	Lobito	AGO002009
Bie	AGO003	Andulo	AGO003001
Bie	AGO003	Camacupa	AGO003002
Bie	AGO003	Catabola	AGO003003
Bie	AGO003	Chinguar	AGO003004
Bie	AGO003	Chitembo	AGO003005
Bie	AGO003	Cuembra	AGO003006
Bie	AGO003	Cunhinga	AGO003007
Bie	AGO003	Kuito	AGO003008
Bie	AGO003	Nhanrea	AGO003009
Cabinda	AGO004	Belize	AGO004001
Cabinda	AGO004	Buco-Zau	AGO004002
Cabinda	AGO004	Cabinda	AGO004003
Cabinda	AGO004	Cacongo	AGO004004
Cuando Cubango	AGO005	Calai	AGO005001
Cuando Cubango	AGO005	Cuangar	AGO005002
Cuando Cubango	AGO005	Cuchi	AGO005003
Cuando Cubango	AGO005	Cuito Cuanavale	AGO005004
Cuando Cubango	AGO005	Dirico	AGO005005
Cuando Cubango	AGO005	Mavinga	AGO005006
Cuando Cubango	AGO005	Menongue	AGO005007
Cuando Cubango	AGO005	Nancova	AGO005008
Cuando Cubango	AGO005	Rivungo	AGO005009
Cuanza Norte	AGO006	Ambaca	AGO006001
Cuanza Norte	AGO006	Banga	AGO006002
Cuanza Norte	AGO006	Bolongongo	AGO006003
Cuanza Norte	AGO006	Cambanbe	AGO006004
Cuanza Norte	AGO006	Cazengo	AGO006005
Cuanza Norte	AGO006	Dembos	AGO006006
Cuanza Norte	AGO006	Golungo Alto	AGO006007
Cuanza Norte	AGO006	Gonguembo	AGO006008
Cuanza Norte	AGO006	Lucala	AGO006009
Cuanza Norte	AGO006	Quiculungo	AGO006010
Cuanza Norte	AGO006	Samba Caju	AGO006011
Cuanza Sul	AGO007	Amboim	AGO007001
Cuanza Sul	AGO007	Cassongue	AGO007002
Cuanza Sul	AGO007	Conda	AGO007003
Cuanza Sul	AGO007	Ebo	AGO007004
Cuanza Sul	AGO007	Libolo	AGO007005
Cuanza Sul	AGO007	Mussende	AGO007006
Cuanza Sul	AGO007	Porto Amboim	AGO007007
Cuanza Sul	AGO007	Quibala	AGO007008
Cuanza Sul	AGO007	Quilenda	AGO007009
Cuanza Sul	AGO007	Seles	AGO007010
Cuanza Sul	AGO007	Sumbe	AGO007011
Cuanza Sul	AGO007	Waku Kungo	AGO007012
Cunene	AGO008	Cahama	AGO008001
Cunene	AGO008	Cuanhama	AGO008002
Cunene	AGO008	Curoca	AGO008003
Cunene	AGO008	Cuvelai Namacunde	AGO008004
Cunene	AGO008	Namacunde	AGO008005
Cunene	AGO008	Ombadja	AGO008006

Huambo	AGO009	Bailundo	AGO009001
Huambo	AGO009	Caala	AGO009002
Huambo	AGO009	Catchiungo	AGO009003
Huambo	AGO009	Ekunha	AGO009004
Huambo	AGO009	Huambo	AGO009005
Huambo	AGO009	Londuimbale	AGO009006
Huambo	AGO009	Longonjo	AGO009007
Huambo	AGO009	Mungo	AGO009008
Huambo	AGO009	Tchicala-Tcholoanga	AGO009009
Huambo	AGO009	Tchindjenje	AGO009010
Huambo	AGO009	Ucuma	AGO009011
Huila	AGO010	Caconda	AGO010001
Huila	AGO010	Caluquembe	AGO010002
Huila	AGO010	Chiange	AGO010003
Huila	AGO010	Chibia	AGO010004
Huila	AGO010	Chicomba	AGO010005
Huila	AGO010	Chipindo	AGO010006
Huila	AGO010	Humpata	AGO010007
Huila	AGO010	Jamba	AGO010008
Huila	AGO010	Kuvango	AGO010009
Huila	AGO010	Lubango	AGO010010
Huila	AGO010	Matala	AGO010011
Huila	AGO010	Quilengues	AGO010012
Huila	AGO010	Quipungo	AGO010013
Luanda	AGO011	Cacuaco	AGO011001
Luanda	AGO011	Cazenga	AGO011002
Luanda	AGO011	Ingombota	AGO011003
Luanda	AGO011	Kilamba Kiaxe	AGO011004
Luanda	AGO011	Maianga	AGO011005
Luanda	AGO011	Rangel	AGO011006
Luanda	AGO011	Samba	AGO011007
Luanda	AGO011	Sambizanga	AGO011008
Luanda	AGO011	Viana	AGO011009
Luanda Norte	AGO012	Cambulo	AGO012001
Luanda Norte	AGO012	Camulemba	AGO012002
Luanda Norte	AGO012	Capenda	AGO012003
Luanda Norte	AGO012	Chitato	AGO012004
Luanda Norte	AGO012	Cuango	AGO012005
Luanda Norte	AGO012	Cuangula	AGO012006
Luanda Norte	AGO012	Cuilo	AGO012007
Luanda Norte	AGO012	Lubalo	AGO012008
Luanda Norte	AGO012	Tchitato	AGO012009
Luanda Norte	AGO012	Xa Muteba	AGO012010
Luanda Sul	AGO013	Cacolo	AGO013001
Luanda Sul	AGO013	Dala	AGO013002
Luanda Sul	AGO013	Muconda	AGO013003
Luanda Sul	AGO013	Saurimo	AGO013004
Malanje	AGO014	Cacuzo	AGO014001
Malanje	AGO014	Calandula	AGO014002
Malanje	AGO014	Cambundi-Catembo	AGO014003
Malanje	AGO014	Cangandala	AGO014004
Malanje	AGO014	Caombo	AGO014005
Malanje	AGO014	Cuaba Nzogo	AGO014006

Malanje	AGO014	Cunda-Dia-Baza	AGO014007
Malanje	AGO014	Luquembo	AGO014008
Malanje	AGO014	Malange	AGO014009
Malanje	AGO014	Marimba	AGO014010
Malanje	AGO014	Massango	AGO014011
Malanje	AGO014	Mucari	AGO014012
Malanje	AGO014	Quela	AGO014013
Malanje	AGO014	Quirima	AGO014014
Moxico	AGO015	Alto Zambeze	AGO015001
Moxico	AGO015	Bundas	AGO015002
Moxico	AGO015	Camanongue	AGO015003
Moxico	AGO015	Cameia	AGO015004
Moxico	AGO015	Leua	AGO015005
Moxico	AGO015	Luau	AGO015006
Moxico	AGO015	Lucano	AGO015007
Moxico	AGO015	Luchazes	AGO015008
Moxico	AGO015	Moxico	AGO015009
Namibe	AGO016	Bibala	AGO016001
Namibe	AGO016	Camacuio	AGO016002
Namibe	AGO016	Namibe	AGO016003
Namibe	AGO016	Tombwa	AGO016004
Namibe	AGO016	Virei	AGO016005
Uige	AGO017	Alto Cauale	AGO017001
Uige	AGO017	Ambuila	AGO017002
Uige	AGO017	Bembe	AGO017003
Uige	AGO017	Buenguas	AGO017004
Uige	AGO017	Damba	AGO017005
Uige	AGO017	Macocola	AGO017006
Uige	AGO017	Mucaba	AGO017007
Uige	AGO017	Negage	AGO017008
Uige	AGO017	Puri	AGO017009
Uige	AGO017	Quimbele	AGO017010
Uige	AGO017	Quitexe	AGO017011
Uige	AGO017	Sanza Pombo	AGO017012
Uige	AGO017	Songo	AGO017013
Uige	AGO017	Uige	AGO017014
Uige	AGO017	Zombo	AGO017015
Zaire	AGO018	Cuimba	AGO018001
Zaire	AGO018	M'banza Congo	AGO018002
Zaire	AGO018	Noqui	AGO018003
Zaire	AGO018	N'zeto	AGO018004
Zaire	AGO018	Soyo	AGO018005
Zaire	AGO018	Tomboco	AGO018006
18 units		163 units	

Para o projeto AdB TAD é preciso identificar províncias ou distritos onde se podem desenvolver uma iniciativa de recolha de dados com médios digitais appropriados no campo como DPT ou o pocket PC, ou eee-mini laptops por exemplo. Em que distritos podemos começar?

SADC-TAD AdB funded project / Handheld / DPT Digital pen technology / Handhelds

Try to indicate in which Partitions you would like implementing a Handheld / DPT Digital pen technology connected to LIMS templates and system (three templates of LIMS are selected to be the first implemented at grass root level: **Module 1 Census, **Module 10 Outbreak and Module 11 Vaccination**).**

Country:	Angola
Representativity:	January 2005
Source of the data:	Instituto Geografico e Cadastral de Angola
Source of the codes:	SALB project, Copyright © United Nations 2002-2005. All rights reserved
Comments:	With the agreement of the NMA, the letters of administrative units names containing accents have been changed as follows: é became e, í became i, ú became u, ô became o in order to follow the specifications of the project.

1st administrative level names	1st administrative level codes	2nd administrative level names	2nd administrative level codes Distritos preferidos Para usar o DPT
Bengo	AGO001	Ambriz	
Bengo	AGO001	Bula Atumba	
Bengo	AGO001	Dande	
Bengo	AGO001	Icolo e Bengo	
Bengo	AGO001	Muxima	
Bengo	AGO001	Nambuangongo	
Bengo	AGO001	Pango Aluquem	
Benguela	AGO002	Baia Farta	
Benguela	AGO002	Balombo	
Benguela	AGO002	Benguela	
Benguela	AGO002	Bocoio	
Benguela	AGO002	Catumbela	
Benguela	AGO002	Chongoroi	
Benguela	AGO002	Cubal	
Benguela	AGO002	Ganda	
Benguela	AGO002	Lobito	
Bie	AGO003	Andulo	
Bie	AGO003	Camacupa	
Bie	AGO003	Catabola	
Bie	AGO003	Chinguar	
Bie	AGO003	Chitembo	
Bie	AGO003	Cuemba	
Bie	AGO003	Cunhinga	
Bie	AGO003	Kuito	
Bie	AGO003	Nhanrea	
Cabinda	AGO004	Belize	
Cabinda	AGO004	Buco-Zau	
Cabinda	AGO004	Cabinda	
Cabinda	AGO004	Caongo	
Cuando Cubango	AGO005	Calai	
Cuando Cubango	AGO005	Cuangar	
Cuando Cubango	AGO005	Cuchi	
Cuando Cubango	AGO005	Cuito Cuanavale	
Cuando Cubango	AGO005	Dirico	
Cuando Cubango	AGO005	Mavinga	
Cuando Cubango	AGO005	Menongue	
Cuando Cubango	AGO005	Nancova	
Cuando Cubango	AGO005	Rivungo	

Cuanza Norte	AGO006	Ambaca
Cuanza Norte	AGO006	Banga
Cuanza Norte	AGO006	Bolongongo
Cuanza Norte	AGO006	Cambanbe
Cuanza Norte	AGO006	Cazengo
Cuanza Norte	AGO006	Dembos
Cuanza Norte	AGO006	Golungo Alto
Cuanza Norte	AGO006	Gonguembo
Cuanza Norte	AGO006	Lucala
Cuanza Norte	AGO006	Quiculungo
Cuanza Norte	AGO006	Samba Caju
Cuanza Sul	AGO007	Amboim
Cuanza Sul	AGO007	Cassongue
Cuanza Sul	AGO007	Conda
Cuanza Sul	AGO007	Ebo
Cuanza Sul	AGO007	Libolo
Cuanza Sul	AGO007	Mussende
Cuanza Sul	AGO007	Porto Amboim
Cuanza Sul	AGO007	Quibala
Cuanza Sul	AGO007	Quilenda
Cuanza Sul	AGO007	Seles
Cuanza Sul	AGO007	Sumbe
Cuanza Sul	AGO007	Waku Kungo
Cunene	AGO008	Cahama
Cunene	AGO008	Cuanhama
Cunene	AGO008	Curoca
Cunene	AGO008	Cuvelai Namacunde
Cunene	AGO008	Namacunde
Cunene	AGO008	Ombadja
Huambo	AGO009	Bailundo
Huambo	AGO009	Caala
Huambo	AGO009	Catchiungo
Huambo	AGO009	Ekunha
Huambo	AGO009	Huambo
Huambo	AGO009	Londuimbale
Huambo	AGO009	Longonjo
Huambo	AGO009	Mungo
Huambo	AGO009	Tchicala-Tcholoanga
Huambo	AGO009	Tchindjenje
Huambo	AGO009	Ucuma
Huila	AGO010	Caconda
Huila	AGO010	Caluquembe
Huila	AGO010	Chiange
Huila	AGO010	Chibia
Huila	AGO010	Chicomba
Huila	AGO010	Chipindo
Huila	AGO010	Humpata
Huila	AGO010	Jamba
Huila	AGO010	Kuvango
Huila	AGO010	Lubango
Huila	AGO010	Matala
Huila	AGO010	Quilengues
Huila	AGO010	Quipungo

Luanda	AGO011	Cacuaco
Luanda	AGO011	Cazenga
Luanda	AGO011	Ingombota
Luanda	AGO011	Kilamba Kiaxe
Luanda	AGO011	Maianga
Luanda	AGO011	Rangel
Luanda	AGO011	Samba
Luanda	AGO011	Sambizanga
Luanda	AGO011	Viana
Luanda Norte	AGO012	Cambulo
Luanda Norte	AGO012	Camulemba
Luanda Norte	AGO012	Capenda
Luanda Norte	AGO012	Chitato
Luanda Norte	AGO012	Cuangula
Luanda Norte	AGO012	Cuilo
Luanda Norte	AGO012	Lubalo
Luanda Norte	AGO012	Tchitato
Luanda Norte	AGO012	Xa Muteba
Luanda Sul	AGO013	Cacolo
Luanda Sul	AGO013	Dala
Luanda Sul	AGO013	Muconda
Luanda Sul	AGO013	Saurimo
Malanje	AGO014	Cacuzo
Malanje	AGO014	Calandula
Malanje	AGO014	Cambundi-Catembo
Malanje	AGO014	Cangandala
Malanje	AGO014	Caombo
Malanje	AGO014	Cuaba Nzogo
Malanje	AGO014	Cunda-Dia-Baza
Malanje	AGO014	Luquembo
Malanje	AGO014	Malange
Malanje	AGO014	Marimba
Malanje	AGO014	Massango
Malanje	AGO014	Mucari
Malanje	AGO014	Quela
Malanje	AGO014	Quirima
Moxico	AGO015	Alto Zambeze
Moxico	AGO015	Bundas
Moxico	AGO015	Camanongue
Moxico	AGO015	Cameia
Moxico	AGO015	Leua
Moxico	AGO015	Luau
Moxico	AGO015	Lucano
Moxico	AGO015	Luchazes
Moxico	AGO015	Moxico
Namibe	AGO016	Bibala
Namibe	AGO016	Camacuio
Namibe	AGO016	Namibe
Namibe	AGO016	Tombwa
Namibe	AGO016	Virei
Uige	AGO017	Alto Cauale
Uige	AGO017	Ambuila

Uige	AGO017	Bembe
Uige	AGO017	Buenguas
Uige	AGO017	Damba
Uige	AGO017	Macocola
Uige	AGO017	Mucaba
Uige	AGO017	Negage
Uige	AGO017	Puri
Uige	AGO017	Quimbele
Uige	AGO017	Quitexe
Uige	AGO017	Sanza Pombo
Uige	AGO017	Songo
Uige	AGO017	Uige
Uige	AGO017	Zombo
Zaire	AGO018	Cuimba
Zaire	AGO018	M'banza Congo
Zaire	AGO018	Noqui
Zaire	AGO018	N'zeto
Zaire	AGO018	Soyo
Zaire	AGO018	Tomboco
18 units		163 units

Commentarios de Validaçao da lista de divisão do pais / Partition list
Divisões administrativas / ADMIN type, Level 1 and 2, Province and District names
To be updated during adoption mission

Que tipo de divisão tecnicas devem ser implantadas no LIMS (parques nacionais etc..)
Technical partitions to be implemented into LIMS: Status of our discussions
Cf. excel file in a CD folder
To be updated during adoption mission, e.g. dip tanks list and catchment areas

Signatures of partners

Assinaturas dos actors / participantes da redacção da ficha e data

Date / Data:

LIMS PRINT officer /

Coordenador do LIMS no pais

Stakeholders / Parceiro

ANNEX V – Comment sheets (a/ bugs & b/ templates/screens)

a/ Bug records table

List of errors detected in LIMS application and suggested corrections

Name of reporter_____ Position_____ Date _____
errors detected_____

Any report should be reported firstly to PRINT: BBedane@sadc.int

CC to Livestock Unit BHulman@sadc.int

CC to the developer: INFORMATIX INDUSTRY SERVICES Pty Ltd / Thulagano Segokgo
tsegokgo@gmail.com

CC to the external tester: Xavier Juanes Xavier.Juanes@cirad.fr

No.	Component	Module	Tab page	Error detected	Suggested correction

b/ comments sheet

Ficha de Commentarios para os modulos



Comment sheet on LIMS Modules (to complement the SoP sheet)
Ficha de Commentarios para os modulos

Pais / Country: Angola

Liste des Modules et écrans (rapports types Excel) correspondants au système LIMS / *Lista dos Modulos e ecrã (relatórios tipo Excel) do LIMS / List of Modules and screens (SADC Harmonized templates) of LIMS*

- Headers / Timbre / Entête
- Module 1 *Numbers & Composition of Herds* / Effectivos animais do rebanho nacional / Effectifs nationaux – recensement animal
 - 1. *Nr by species* / effectivos animais por espécies / Nombre par espèce
 - 2. *Nr by economics* / effectivos animais por função económica / Nombre par fonction économique
 - 3. *Nr by breeds* / Effectivos animais por raça / Nombre par race
 - 4. *Nr by herd structure* / Effectivos animais por idade e sexo / Nombre par âge et sexe (démographie)
- Module 2 *Human Households & Population in Livestock farming* / Agregados familiares criadores / Ménage engagés dans l'agriculture et l'élevage
 - 1. *Human Population* / Agregados familiares / Ménages et population humaine
- Module 3 *Production Parameters* / Produção animal / Production animale
 - 1. *Slaughter* / Abate (carne) / Abattages
 - 2. *Milk* / Leite / Lait
 - 3. *Dairy products* / Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides, skins* / Curos e Peles / Cuirs et peaux
- Module 4 *Livestock & Products Price* / Preços dos productos animais / Prix des produits d'élevage et animaux vivants
 - 1. *Live animals* / Animal vivo / Animaux vivants
 - 2. *Meat products* / Producto de carne / Produits carnés
 - 3. *Milk products* / Leite e Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides & skins* / Curos e Peles / Cuirs et peaux
 - 6. *Fiber & feathers* / Fibras e plumas / Fibres animales et plumes
- Module 5 *Livestock & Products trade: import/export* / Importação e Exportação / Import et Export
 - 1. *Live Animals* / Animal vivo / Animaux vivants
 - 2. *L. stock Products* / Producto animais / Produits d'élevage
 - 3. *L. stock Inputs* / Inputs / Intrants de l'élevage
- Module 6 *LS Infrastructures* / Infra-Estructuras / Infrastructures
 - *Generic Partitions* / Divisões do pais / Divisions du pays
 - 1. *Administrative* / Administrativa / Administratives

- 2.Technical / Técnico / Techniques

Infrastructures Agreg. / Infra-Estructuras Agregados / Infrastructures description agrégées

- 3.*Dipping* / Tanque banheiros / Bain détaqueur
- 4.*Pens* / currais / Enclos de vaccination
- 5. *Vet clinics* / Clinicas vet. / Cliniques vétérinaires
- 6.*Govt Offices* / Officíos do governo / Bureaux de l'état
- 7. *Mun Abattoirs & slabs* / Matadouros municipais e locais e casas de matança / Abattoirs locaux et tueries
- 8. *Milk Collection* / Recolha de leite / Récolte de lait liquide
- 9. *Livestock Markets* / Mercados / Marchés
- 10. *Storage Products* / Armazens / Entrepôts et Stocks

Infrastructures Detailed / Infra-Estructuras detalhados / Infrastructures détaillées

- 1. *Vet Diagnostic Labs* / Laboratorios / Laboratoires de diagnostic
- 2. *Vet Vaccine Labs* / Productores de Vacinas / Producteurs de vaccins
- 3. *Industrial Abattoirs* / Matadouros industriais / Abattoirs industriels
- 4. *Dairy Processing Plants* / Usina de transformação de leite / Unité de transformation laitière
- 5. *Secondary Markets*, / Mercados secundarios / Marchés secondaires
- 6. *Port of Entry & Exit* / Portos de entrada e saída / Postes d'inspection en frontière PIF

- Module 7 *Meat Inspection / Food safety* / Segurança Sanitaria dos alimentos / Sécurité sanitaire des aliments
 - 1. Ante-mortem / Inspecção ante mortem / Inspection ante mortem en abattoir
 - 2. Post-mortem / Inspecção post mortem / Inspection post mortem en abattoir
- Module 8 *Livestock Associations and Service Providers* / Associações de criadores e fornecedores de servicios / Association d'éleveurs et fournisseurs de services
 - 1. *Umbrella org & assoc* / Associações / Associations et Confédérations
 - 2. *Private companies* / Privado / Secteur privé
 - 3. *Government* / Público / Secteur public
- Module 9 *LS related Laws, Regulation and Acts, policy docs* / Legislação e politicas agro pecuaria / Législation et documentsd e politique sur le secteur élevage
 - 1. *National Docs* / Nível nacional / niveau national
 - 2. *International Docs* / Niveis internacional e regional (SADC) / Niveau international ou sous régional (SADC)
- Module 10 *Disease Outbreak notification* / Notificação dos surtos de doenças / Information sanitaire notification d'épidémies animales
 - *Outbreaks* / Epidemias focos / Foyers d'Epizooties animales
- Module 11 *Vaccinations* (e.g. TAD's) / Vacinação / Vaccinations
 - 1. *Vaccination* / vacinações efectuadas / Vaccinations effectuées (prophylactique et de contrôle)

Por Favor manda o seus comentários ate / Comments sheet and reports to be sent to

PRINT: BBedane@sadc.int

CC to Livestock Unit FANR BHulman@sadc.int

If bugs reports: CC to the developer: INFORMATIX INDUSTRY SERVICES Pty Ltd / Thulagano Segokgo tsegokgo@gmail.com

If bugs reports: CC to the external tester: Xavier Juanes Xavier.Juanes@cirad.fr

Part 1: Header / Timbre

Comentários sobre o modulo / relatorio / ecrã numero ?

Comments on which Template Number & Screen number: (code : Component - Module - and Template Number / Screen number from left to right when possible to account like this)

Data / Date:

O seu Nome, e posição, e email/ Name of stakeholder(s) commenting & Institution(s) of reference (email of contact person for the modification requested):

Part 2: images (when needed) / imagem do relatorio discutado
e.g. Module 3, Screen 4 (with header accounted for)

Template / relatorio

4. Processed Dairy Products (from all species)												
Partition 1, e.g. Region/Province	Partition 2, e.g. District	Pasteurized milk Lt**	UHT milk Lt	Fermented milk Lt	Yoghurt Lt	Cheese Kg**	Butter Kg	Cream Lt	Powder milk Kg	Other* products	Other * products	Other * products
Reg/prov 1.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
Reg/prov 2.....	Dist 1.....											
	Dist 2.....											
	Dist 3.....											
etc												

* Specify which product
** Lt= Litres, Kg= Kilograms

LIMS gives option for cattle and goat = wrong
LIMS: take out option "milk"
Not in LIMS: fermented milk, cream, other products
LIMS: Yoghurt/Fermented products together

3.1. Processed Dairy Products from Cattle

Produtos leiteiros (lacticinios)

Divisão Tipo*	Divisão ao nível 1, e Região/Provincia	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	Iogurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
etc												

* Specify Administrative or Technical bounderies (admin or techn)

** Specify which product

3.2. Processed Dairy Products from Goats

Divisão Tipo*	Divisão ao nível 1, e Região/Provincia	Divisão ao nível 2 Distrito	Leite Pasteurizado (ltr)	Leite UHT Ultra pasteurizado (ltr)	Leite Fermentado (ltr)	Iogurte (ltr)	Queijo duro (kg)	Manteiga (kg)	Natas (ltr)	Leite em po (kg)	Outros** productos	Outros** productos
.....	Reg/prov 1.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
.....	Reg/prov 2.....	Dist 1.....										
		Dist 2.....										
		Dist 3.....										
etc												

Corresponding Screen / ecrã que corresponde

Livestock Information Management System - [frmLiveStockProductsMain]

Administration Animal Production Livestock Marketing and Trade Livestock Development Animal Health

Produção Animal

País : País | Ano : Ano | Período : Período

Officer : Officer | Data do relatório : Date of Report | Data da Apresentação : Date of Presentation

Cabeçalho do Relatório | Animais abatidos e carne produzida | Produção leiteira e laticínios transformados | Produtos Leitariais transformados | Ovos | Couros, peles e penas

Seleção Records

Tipo de partição	Administrative	Categoria de Produto	Partition Type	Partition Level	Partition Name	Species	Product
Nível Partição	Administrative	Espécie					
Nome Partição							

Nível Partição Nome Partição Quantidade Unidade de Medida Equivalente leite litros Data da criação Criado por Data da atualização Modificado por

Mode Formulaire

LIMS - [frmLiveStockProductsMain]

Administration Livestock Development Animal Health Animal Production Livestock Trade and Marketing

Livestock Products

Country: Malawi Year: 2005
Period: January Officer: Chirambo Date Of Report: 22/06/2008 Date of Submission:

Report Header | Animal Slaughtered & Meat Produced | Milk production & Milk processed | Dairy Products processed | Eggs | Hides,Skins,Fibre & Feathers

Records Selection

Partition Type	Product Category	Partition Type	Partition Level	Partition Name	Species	Product
Partition Level	Species	Administrative	1	Central	Cattle	Fermented Milk/Yoghurt
Partition Name		Administrative	1	Central	Cattle	Cheese (Hard)
		Administrative	1	Central	Cattle	Butter
		Administrative	1	Central	Cattle	Powder Milk
		Administrative	1	Central	Goats	UHT Milk

Partition Partition Name Quantity Unit of Measure Equivalent Milk Date Created Created By Date Modified Modified By Level Liters

Mode Formulaire

Part 3: *Comments on the template / comentário do relatório*

Part 4: *Comments on the screen / comentario do ecrã*

Part 5: Modificação ou ajustamento sugeridos / Modifications - Adjustments suggested / requested by categories (referring to the application screen, and template) e.g. Contents, functionalities (export etc..), categories / parameters etc..

Ex: contidos , funcionalidades do software, categorias seleccionadas por a SADC / tradução.....

Part 6: Comentarios sobre os requerimentos do software / Comments on the Queries / Reports implemented in LIMS screen / Module e.g. Request for Modifications / Addition of some queries, to provide tables as input to other external info. System, e.g. to export to CSO (CSO surveys, Agric. Stats...)

Ex: Modificação e ajustamento – addições sugeridos ?

Part 7: Comentarios sobre os manuais / Comments on specific contents that would be useful in national manuals used during a LIMS training (on line or classic training)

LIMS Manuals: Manual for Data Clerk (reporting manual) / Manual for trainers (these manuals are pending and will be posted on line and send to the group)

e.g. special “convention” or definitions for proper interpretation of some categories implemented into the screens and templates (e.g. Grading system, follow up of an outbreak, names of category for small stock)

Que contidos poderiam ser incluidos nos manuais, para os manuais ser mas especificados para Angola?

Part 8: Deteção dos erros do software/ Bugs identified (please use the form attached): Error detection sheet2.doc, and send the table to:

Manda os seus relatorios dos “bugs” ate

Any bug report should be reported to PRINT: BBedane@sadc.int

CC to Livestock Unit BHulman@sadc.int

CC to the developer: INFORMATIX INDUSTRY SERVICES Pty Ltd / Thulagano Segokgo tsegokgo@gmail.com

CC to the external tester: Xavier Juanes Xavier.Juanes@cirad.fr

Extra comments

Part 9: Xtra Comentarios sobre o portal AIMS quand visitando lo (usando a cartografia dinamica etc.) / Comments on the Functionalities of AIMS portal (cf. portal) and LIMS portal (web mapping so far) on the web that you would like:

<http://aims.sadc.int> / <http://lims.sadc.int>

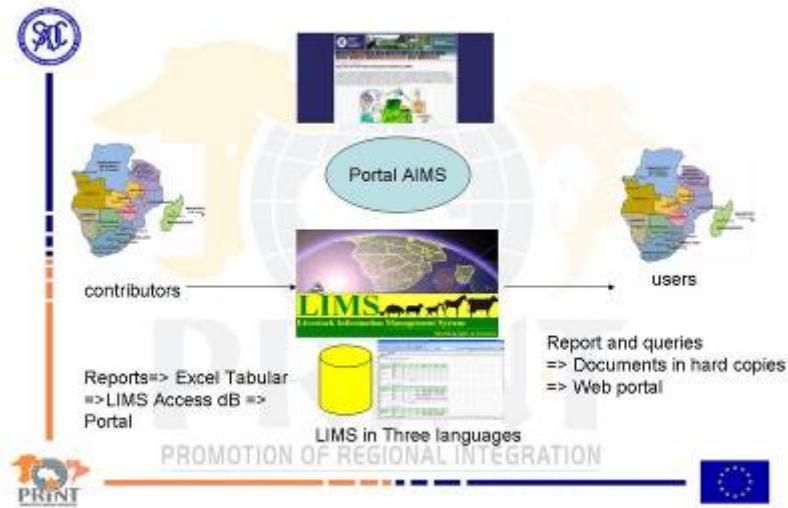
Reminder: objectives of functionalities:

- To present spatial and non-spatial information
- To develop directories of institutions (and experts) – information exchange standards
- To carry out customised search for projects, technologies, people, institutions, publications
- To establish electronic networks- thematic & national, with associated tools (discussion forums, collaborative, dissemination)
- To devolve content generation to level of information producer
- To aggregate national news/events at regional level

- *To host Learning tools and materials*
- **Para apresentar informação espacial e non-espacial**
- **Para desenvolver anuarios de instituições (e expertos)**
- **Para fazer pesquisas de informação específicas como projectos, tecnologias, pessoas, instituição, publicação uteis..**
- **Para construir rede electronicos para discutir temas com usado dos ferramentas do Web20 (forum de discussão...)**
- **Para agregar factos nacionais e noticias ao nível regional (news/events at regional level)**
- **Para albergar ferramentas e materiais (contidos) para a educação agricola veterinaria etc..**

Facilities to use / Facilities to contribute to:

- *Web pages: create new contents and Web pages (e.g. national LS pages)*
- *Web mapping*
- *Post News and use News list (events list) and their aggregation (i.e. of most recent news, through « syndication » of news and RSS feeds)*
- *Use Search engine (custom search with specific engine)*
- *Use and contribute to a Non spatial library: documents of interest*
- *Wiki : contribute to an encyclopedia of LS sector in SADC*
- *Use D-groups (discussion) soon link to SMS*
- *Build contents for a Distance learning and Training on line – (Moodle plateform), e.g. training on LIMS adapted for the National context*
- *Use links to important Information sites thanks to E-Frame (web frame of other sites into AIMS)*
- *Use RSS feeds*
-
- **Colocar informação nas Páginas do portal web / Web pages: creation (e.g. national LS pages)**
- **Fazer uma Cartografia dinâmica sobre o web / Web mapping**
- **Usar Notícias agregadas/ News list (events list) and their aggregation (i.e. of most recent news, through « syndication » of news and RSS feeds)**
- **Fazer Pesquisa no Web (Internet)/ Search engine (custom search with specific engine)**
- **Usar Documentos / Non spatial library: documents of interest**
- **Ler uma encyclopédia Wiki: an encyclopedia of LS sector in SADC**
- **Melhorar Redes / D-groups (discussion) soon link to SMS**
- **Participar numa sessão de Educação a distância / Distance learning and Training on line – (Moodle plateform)**
- **Usar os E-Quadros / E-Frame (web frame of other sites into AIMS)**
- **Usar RSS feeds**



e.g. I would like a web page to get the updated versions of LIMS and of the manual
 I would like a FAQ page
 I would like a D-Group for discussing agric. stats in a forum

Que funcionalidades do portal voce's vão usar mas ? *Most feature to be used?*

Que funcionalidades do portal voce's vão contribuir mas ? *Most features to contributed to:*

Signatures of partners

Assinaturas dos actores / participantes da redacção da ficha e data

Date / Data:

LIMS PRINT officer /

Coordenador do LIMS no pais

Stakeholders / Parceiro

LIMS training Procedures with VISTA

There are two security features into VISTA: UAC User Account Control & W.R.P / Windows Ressource Protection, put in place to protect systeme partition & register base
We will change the UAC: User Account Control: this introduce a first grading system for allowing some rights to administrators, users, guests etc..

Any report should be reported to PRINT: BBedane@sadc.int

CC to Livestock Unit BHulman@sadc.int

CC to the developer: INFORMATIX INDUSTRY SERVICES Pty Ltd / Thulagano Segokgo tsegokgo@gmail.com

CC to the external tester: Xavier Juanes Xavier.Juanes@cirad.fr

- **Stage 1:**

Start with Turning User account control UAC off

Control panel / user account

Turn User account control on or off / off UAC

Then restart your computer to apply the rules

Enter as a user

Example users in Zambia

Users (Terminial2NZILA\users)

When you will exit your LIMS “session” we suggest you turn it on again for security reasons

- **Stage 2**

Install LIMS

Go to the folder

- **Stage 3**

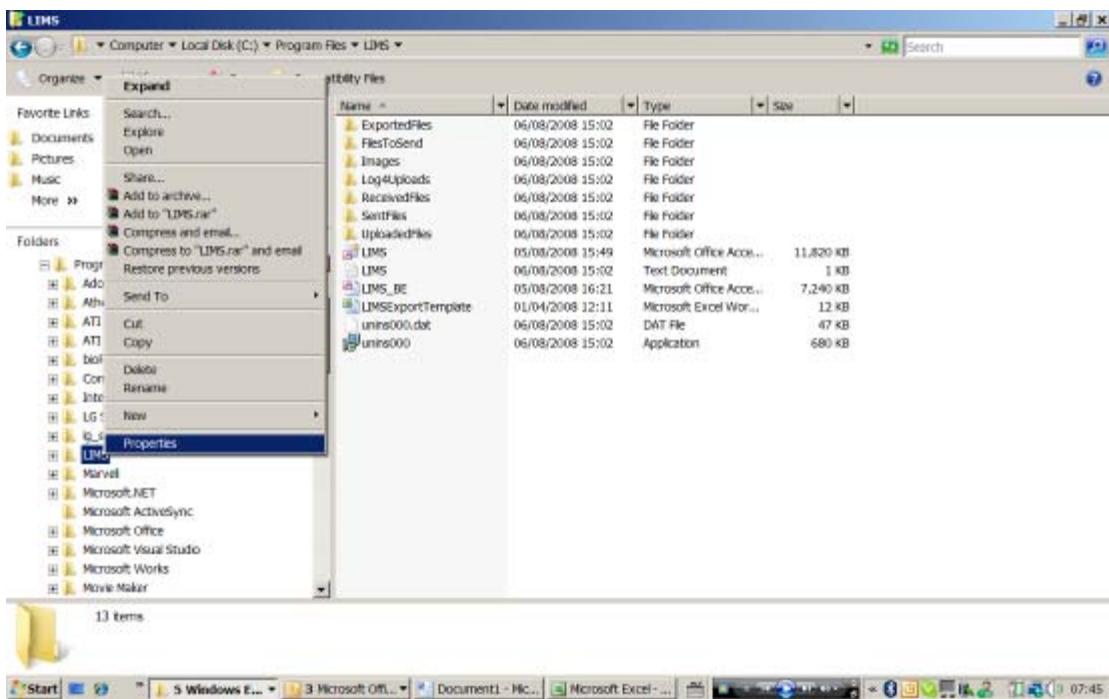
Secondly allow all privileges to users for the LIMS folder properties

Way one to “allow“ all privileges to users

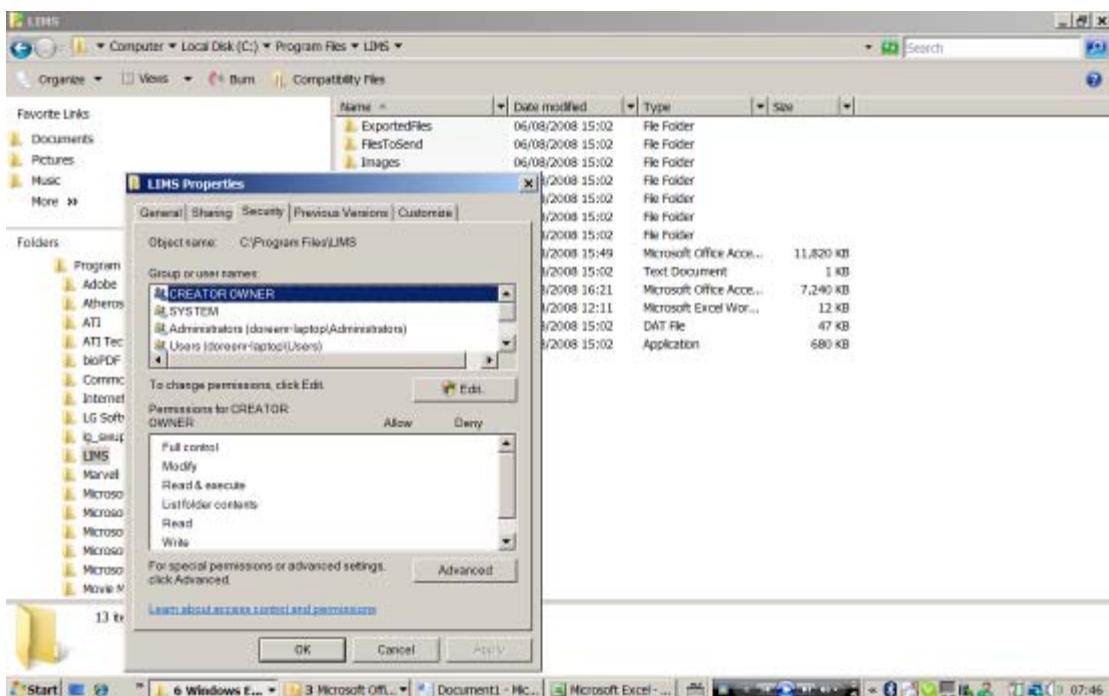
Step 1

Go the LIMS folder under Program Files (where generally LIMS is installed)

Right click on the “LIMS” folder and select properties



Step 2



You may have in fact no creator owner but users only, do it on users

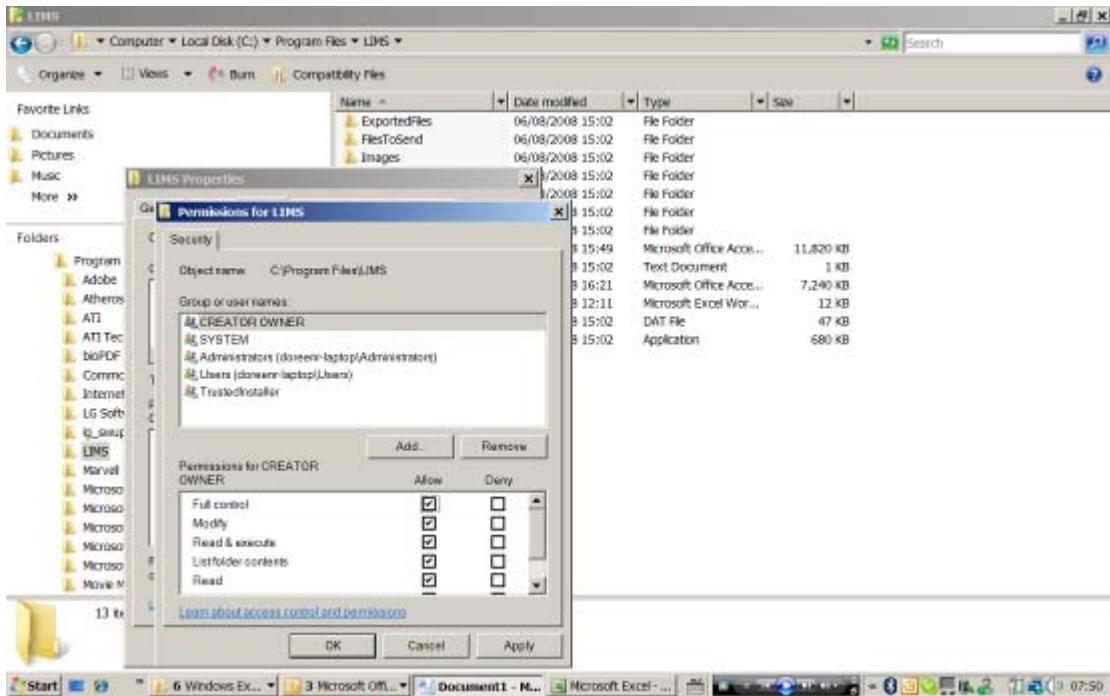
Step 3

Click Edit button and Click on continue if prompted

You may have to enter the windows by clicking advanced etc..

Step 4

Click Full control for “CREATOR OWNER” or USERS (better as VISTA generally does not allow changes on creator owner) or select the “Modify”, “Read & Execute”, ... permission. The permission settings should rather be modified for “Users”.



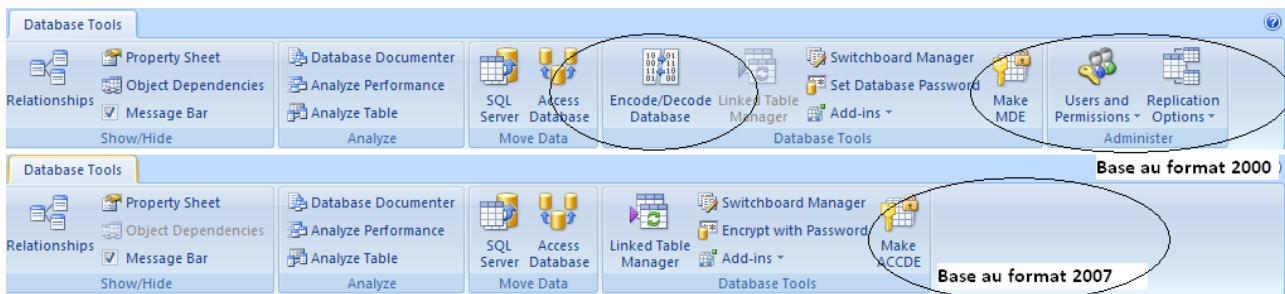
Step 5 – Click Ok

OS (Vista or XP) and versions of Access 2003 2007

Under Access 2007 (what ever the OS Vista or XP)

The header under Access 2007 will change according to the type of database application we are dealing with

LIMS is based on Access 2003 and should appear as the top header in your computer



You may face problems but every time you record and report bugs please do indicate under which platform OS and version of Access you got these bugs

The four possible configurations you will have to mention

	Access 2003	Access 2007
OS XP	1	2
OS Vista	3	4

ANNEX V – Admin. Partitions as implemented into LIMS for Angola before the training (without edition): in green ADMIN2, in yellow the ADMIN1

CountryCode	PartitionLevel	PartitionType	PartitionName	ParentPartitionName
AO	1	Administrative	Zaire	
AO	1	Administrative	Bengo	
AO	1	Administrative	Uige	
AO	1	Administrative	test	
AO	1	Administrative	Namibe	
AO	1	Administrative	Moxico	
AO	1	Administrative	Malanje	
AO	1	Administrative	Luanda Sul	
AO	1	Administrative	Luanda Norte	
AO	1	Administrative	Luanda	
AO	1	Administrative	Benguela	
AO	1	Administrative	Huambo	
AO	1	Administrative	Cunene	
AO	1	Administrative	Cuanza Sul	
AO	1	Administrative	Cuanza Norte	
AO	1	Administrative	Cuando Cubango	
AO	1	Administrative	Cabinda	
AO	1	Administrative	Bie	
AO	1	Administrative	Huila	
AO	2	Administrative	Muxima	Bengo
AO	2	Administrative	Icolo e Bengo	Bengo
AO	2	Administrative	Nambuangongo	Bengo
AO	2	Administrative	Pango Aluquem	Bengo
AO	2	Administrative	Ambriz	Bengo
AO	2	Administrative	Bula Atumba	Bengo
AO	2	Administrative	Dande	Bengo
AO	2	Administrative	Lobito	Benguela
AO	2	Administrative	Ganda	Benguela
AO	2	Administrative	Balombo	Benguela
AO	2	Administrative	Benguela	Benguela
AO	2	Administrative	Baia Farta	Benguela

AO	2	Administrative	Bocoio	Benguela
AO	2	Administrative	Cubal	Benguela
AO	2	Administrative	Catumbela	Benguela
AO	2	Administrative	Chongoroi	Benguela
AO	2	Administrative	Kuito	Bie
AO	2	Administrative	Nhanrea	Bie
AO	2	Administrative	Camacupa	Bie
AO	2	Administrative	Andulo	Bie
AO	2	Administrative	Cunhinga	Bie
AO	2	Administrative	Cuemba	Bie
AO	2	Administrative	Catabola	Bie
AO	2	Administrative	Chinguar	Bie
AO	2	Administrative	Chitembo	Bie
AO	2	Administrative	Cabinda	Cabinda
AO	2	Administrative	Caongo	Cabinda
AO	2	Administrative	Belize	Cabinda
AO	2	Administrative	Buco-Zau	Cabinda
AO	2	Administrative	Mavinga	Cuando Cubango
AO	2	Administrative	Menongue	Cuando Cubango
AO	2	Administrative	Nancova	Cuando Cubango
AO	2	Administrative	Rivungo	Cuando Cubango
AO	2	Administrative	Calai	Cuando Cubango
AO	2	Administrative	Cuchi	Cuando Cubango
AO	2	Administrative	Dirico	Cuando Cubango
AO	2	Administrative	Cuito Cuanavale	Cuando Cubango
AO	2	Administrative	Cuangar	Cuando Cubango
AO	2	Administrative	Gonguembo	Cuanza Norte
AO	2	Administrative	Lucala	Cuanza Norte
AO	2	Administrative	Samba Caju	Cuanza Norte
AO	2	Administrative	Golungo Alto	Cuanza Norte
AO	2	Administrative	Quiculungo	Cuanza Norte
AO	2	Administrative	Cambanbe	Cuanza Norte
AO	2	Administrative	Ambaca	Cuanza Norte
AO	2	Administrative	Banga	Cuanza Norte
AO	2	Administrative	Bolongongo	Cuanza Norte
AO	2	Administrative	Dembos	Cuanza Norte
AO	2	Administrative	Cazengo	Cuanza Norte
AO	2	Administrative	Mussende	Cuanza Sul
AO	2	Administrative	Libolo	Cuanza Sul
AO	2	Administrative	Seles	Cuanza Sul
AO	2	Administrative	Porto Amboim	Cuanza Sul
AO	2	Administrative	Waku Kungo	Cuanza Sul
AO	2	Administrative	Sumbe	Cuanza Sul
AO	2	Administrative	Quibala	Cuanza Sul
AO	2	Administrative	Quilenda	Cuanza Sul
AO	2	Administrative	Amboim	Cuanza Sul
AO	2	Administrative	Ebo	Cuanza Sul
AO	2	Administrative	Cassongue	Cuanza Sul
AO	2	Administrative	Conda	Cuanza Sul
AO	2	Administrative	Namacunde	Cunene
AO	2	Administrative	Ombadja	Cunene
AO	2	Administrative	Cahama	Cunene
AO	2	Administrative	Curoca	Cunene

AO	2	Administrative	Cuvelai Namacunde	Cunene
AO	2	Administrative	Cuanhama	Cunene
AO	2	Administrative	Mungo	Huambo
AO	2	Administrative	Huambo	Huambo
AO	2	Administrative	Londuimbale	Huambo
AO	2	Administrative	Longonjo	Huambo
AO	2	Administrative	Tchindjenje	Huambo
AO	2	Administrative	Tchicala- Tcholoanga	Huambo
AO	2	Administrative	Ucumã	Huambo
AO	2	Administrative	Caala	Huambo
AO	2	Administrative	Bailundo	Huambo
AO	2	Administrative	Ekunha	Huambo
AO	2	Administrative	Catchiungo	Huambo
AO	2	Administrative	Matala	Huila
AO	2	Administrative	Kuvango	Huila
AO	2	Administrative	Humpata	Huila
AO	2	Administrative	Jamba	Huila
AO	2	Administrative	Lubango	Huila
AO	2	Administrative	Quilengues	Huila
AO	2	Administrative	Quipungo	Huila
AO	2	Administrative	Caconda	Huila
AO	2	Administrative	Caluquembe	Huila
AO	2	Administrative	Chibia	Huila
AO	2	Administrative	Chiange	Huila
AO	2	Administrative	Chicomba	Huila
AO	2	Administrative	Chipindo	Huila
AO	2	Administrative	Maianga	Luanda
AO	2	Administrative	Ingombota	Luanda
AO	2	Administrative	Kilamba Kjaxe	Luanda
AO	2	Administrative	Sambizanga	Luanda
AO	2	Administrative	Rangel	Luanda
AO	2	Administrative	Viana	Luanda
AO	2	Administrative	Samba	Luanda
AO	2	Administrative	Cacuaco	Luanda
AO	2	Administrative	Cazenga	Luanda
AO	2	Administrative	Lubalo	Luanda Norte
AO	2	Administrative	Xa Muteba	Luanda Norte
AO	2	Administrative	Tchitato	Luanda Norte
AO	2	Administrative	Camulemba	Luanda Norte
AO	2	Administrative	Cambulo	Luanda Norte
AO	2	Administrative	Cuilo	Luanda Norte
AO	2	Administrative	Cuangula	Luanda Norte
AO	2	Administrative	Capenda	Luanda Norte
AO	2	Administrative	Cuango	Luanda Norte
AO	2	Administrative	Chitato	Luanda Norte
AO	2	Administrative	Muconda	Luanda Sul
AO	2	Administrative	Saurimo	Luanda Sul
AO	2	Administrative	Cacolo	Luanda Sul
AO	2	Administrative	Dala	Luanda Sul
AO	2	Administrative	Massango	Malanje
AO	2	Administrative	Marimba	Malanje

AO	2	Administrative	Malange	Malanje
AO	2	Administrative	Luquembo	Malanje
AO	2	Administrative	Mucari	Malanje
AO	2	Administrative	Quela	Malanje
AO	2	Administrative	Quirima	Malanje
AO	2	Administrative	Calandula	Malanje
AO	2	Administrative	Cacuzo	Malanje
			Cambundi-Catembó	
AO	2	Administrative	Cunda-Dia-Baza	Malanje
AO	2	Administrative	Cangandala	Malanje
AO	2	Administrative	Caombo	Malanje
AO	2	Administrative	Cuaba Nzogo	Malanje
AO	2	Administrative	Moxico	Moxico
AO	2	Administrative	Luchazes	Moxico
AO	2	Administrative	Leua	Moxico
AO	2	Administrative	Lucano	Moxico
AO	2	Administrative	Luau	Moxico
AO	2	Administrative	Camanongue	Moxico
AO	2	Administrative	Cameia	Moxico
AO	2	Administrative	Alto Zambeze	Moxico
AO	2	Administrative	Bundas	Moxico
AO	2	Administrative	Virei	Namibe
AO	2	Administrative	Namibe	Namibe
AO	2	Administrative	Camacuio	Namibe
AO	2	Administrative	Tombwa	Namibe
AO	2	Administrative	Bibala	Namibe
AO	2	Administrative	Macocola	Uige
AO	2	Administrative	Mucaba	Uige
AO	2	Administrative	Sanza Pombo	Uige
AO	2	Administrative	Songo	Uige
AO	2	Administrative	Uige	Uige
AO	2	Administrative	Zombo	Uige
AO	2	Administrative	Negage	Uige
AO	2	Administrative	Quimbele	Uige
AO	2	Administrative	Quitexe	Uige
AO	2	Administrative	Puri	Uige
AO	2	Administrative	Buenguas	Uige
AO	2	Administrative	Alto Cauale	Uige
AO	2	Administrative	Ambuila	Uige
AO	2	Administrative	Bembe	Uige
AO	2	Administrative	Damba	Uige
AO	2	Administrative	M'banza Congo	Zaire
AO	2	Administrative	Soyo	Zaire
AO	2	Administrative	Tomboco	Zaire
AO	2	Administrative	Noqui	Zaire
AO	2	Administrative	N'zeto	Zaire
AO	2	Administrative	Cuimba	Zaire

In Green ADMIN2

In Yellow ADMIN1

ANNEX VI – Administrative partitions as implemented in official databases (in compliance with other information systems) (to be compared to the list currently implemented into LIMS)

ADMIN1
Bengo
Benguela
Bie
Cabinda
Cuando Cubango
Cuanza Norte
Cuanza Sul
Cunene
Huambo
Huila
Luanda
Lunda Norte
Lunda Sul
Malanje
Moxico
Namibe
Uige
Zaire

ADMIN1	ADMIN2
Bengo	Ambriz
Bengo	Dande
Bengo	Dande
Bengo	Icolo e Bengo
Bengo	Icolo e Bengo
Bengo	Icolo e Bengo
Bengo	Nambuangongo
Bengo	Quicama
Bengo	Quicama
Bengo	Quicama
Benguela	Baia Farta
Benguela	Balombo
Benguela	Benguela
Benguela	Bocoio
Benguela	Caimbambo
Benguela	Chongoroi
Benguela	Cubal
Benguela	Ganda
Benguela	Lobito
Bie	Andulo
Bie	Camacupa
Bie	Catabola
Bie	Chinguar
Bie	Chitembo
Bie	Cuemba
Bie	Cunhinga
Bie	Kuito

Bie	N'Harea
Cabinda	Belize
Cabinda	Buco-Zau
Cabinda	Cabinda
Cabinda	Landana
Cuando Cubango	Calai
Cuando Cubango	Cuangar
Cuando Cubango	Cuchi
Cuando Cubango	Cuito Cuanavale
Cuando Cubango	Dirico
Cuando Cubango	Mavinga
Cuando Cubango	Menongue
Cuando Cubango	Nankova
Cuando Cubango	Rivungo
Cuanza Norte	Ambaca
Cuanza Norte	Ambaca
Cuanza Norte	Ambaca
Cuanza Norte	Banga
Cuanza Norte	Bolongongo
Cuanza Norte	Bula Atumba
Cuanza Norte	Cambambe
Cuanza Norte	Cambambe
Cuanza Norte	Cazengo
Cuanza Norte	Dembos
Cuanza Norte	Golungo Alto
Cuanza Norte	Gonguembo
Cuanza Norte	Lucala
Cuanza Norte	Pango Aluquem
Cuanza Norte	Quiculungo
Cuanza Norte	Samba Caju
Cuanza Sul	Amboim
Cuanza Sul	Cassongue
Cuanza Sul	Conda
Cuanza Sul	Ebo
Cuanza Sul	Libolo
Cuanza Sul	Mussende
Cuanza Sul	Porto Amboim
Cuanza Sul	Porto Amboim
Cuanza Sul	Porto Amboim
Cuanza Sul	Quibala
Cuanza Sul	Quilenda
Cuanza Sul	Quilenda
Cuanza Sul	Seles
Cuanza Sul	Sumbe
Cuanza Sul	Waku Kungu
Cunene	Cahama
Cunene	Cuanhama
Cunene	Curoca
Cunene	Cuvelai
Cunene	Namacunde
Cunene	Ombadja
Huambo	Bailundo
Huambo	Caala

Huambo	Ekunha
Huambo	Huambo
Huambo	Katchiungo
Huambo	Londuimbali
Huambo	Longojo
Huambo	Mungo
Huambo	Tchikala-Tcholo.
Huambo	Tchindjenje
Huambo	Ukuma
Huila	Caconda
Huila	Caluquembe
Huila	Chiange
Huila	Chibia
Huila	Chicomba
Huila	Chipindo
Huila	Humpata
Huila	Jamba
Huila	Kuvango
Huila	Lubango
Huila	Matala
Huila	Quilengues
Huila	Quipungo
Luanda	Cacuaco
Luanda	Cacuaco
Luanda	Luanda
Luanda	Viana
Lunda Norte	Cambulo
Lunda Norte	Capenda Camulemb
Lunda Norte	Caungula
Lunda Norte	Chitato
Lunda Norte	Cuango
Lunda Norte	Cuilo
Lunda Norte	Lubalo
Lunda Norte	Lucapa
Lunda Norte	Xa-Muteba
Lunda Sul	Cacolo
Lunda Sul	Dala
Lunda Sul	Muconda
Lunda Sul	Saurimo
Malanje	Cacuso
Malanje	Calandula
Malanje	Cambundi-Catembo
Malanje	Cangandala
Malanje	Caombo
Malanje	Kiwaba N'Zogi
Malanje	Kunda Dia-Baze
Malanje	Luquembo
Malanje	Malanje
Malanje	Marimba
Malanje	Massango
Malanje	Massango
Malanje	Mucari
Malanje	Quela

Malanje	Quirima
Moxico	Alto Zambeze
Moxico	Camanongue
Moxico	Leua
Moxico	Luacano
Moxico	Luacano
Moxico	Luau
Moxico	Luchazes
Moxico	Lumbala N'Guimbo
Moxico	Lumege
Moxico	Moxico
Namibe	Bibala
Namibe	Camacuio
Namibe	Namibe
Namibe	Tombua
Namibe	Virei
Uige	Alto Cauale
Uige	Ambuila
Uige	Bembe
Uige	Buengas
Uige	Bungo
Uige	Damba
Uige	Maquela do Zombo
Uige	Mucaba
Uige	Negale
Uige	Negale
Uige	Negale
Uige	Puri
Uige	Quimbele
Uige	Quitexe
Uige	Santa Cruz
Uige	Sanza Pombo
Uige	Songo
Uige	Uige
Zaire	Cuimba
Zaire	M'Banza Congo
Zaire	Noqui
Zaire	N'Zeto
Zaire	Soyo
Zaire	Tomboco

ADMIN1= Provinces

ADMIN2= Districts = Municipality

EPIDEMIOLOGY AND INFORMATICS SUBCOMMITTEE MEETING

MAURITIUS 15 – 17 APRIL 2008

LIMS Web GIS – Introduction

The SADC Livestock Information Management System (LIMS) is a tool for collection, collation and analysis of livestock related data and sharing of information for decision making and planning. The System relies on the network of livestock professionals in the SADC Member States for data provision and operates a database for the storage and analysis of data and a portal and hardcopy publication for the dissemination of information. The PRINT Livestock Project is in charge of the establishment and running of LIMS on behalf of the Livestock Sector Unit under the Food Agriculture and Natural Resources (FANR) Directorate of the SADC Secretariat. The types of information LIMS covers include Animal Production, Animal Health and Livestock Marketing and Trade.

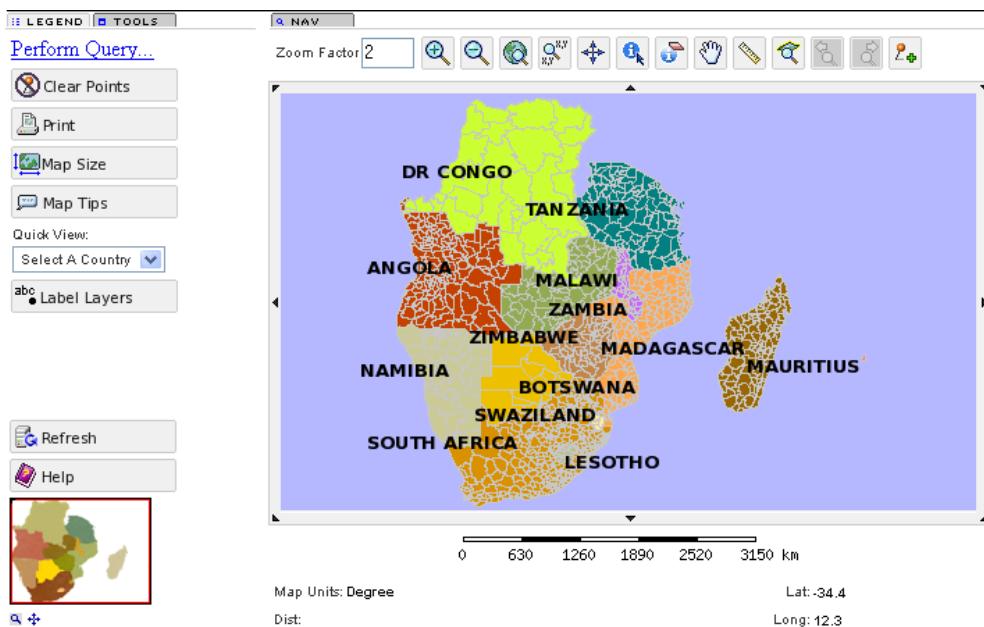
The LIMS Web GIS is a portal for interactive query and display of livestock information for the SADC region. The system is composed of a simple and user friendly query building and a basic mapping facility for searching animal diseases based on different criteria as well as the number of livestock by species at different administrative level in each Member State. The next target of LIMS Web GIS is expanding the interactive queries to other topics of livestock information.

This introduction highlights some of the basic functionalities that are available within the system so as to help users understand the functionality and effectively use the system for searching livestock-related information. The following section summarizes the functionality and the operation of the application.

Using LIMS Web GIS

The Web GIS application interface has four main areas summarized below.

A) The Map & Navigation Tools



B) The Tools Tab



The tools tab shown on the left has a critical functionality for the user. The **Perform Query** function is the most important and is summarized in the following sections. The **Print option** is for printing maps and query results. There is a wizard which guides the user in customizing the map to be printed out. The **Map Size** option allows the user to change the size of the map display area. The **Map Tips** option allows the user to display a selected feature attribute on the map. The **Label Layer** option allows the user to label a selected layer with an attribute on the map. Users can zoom to any particular country by using the **Quick View** option.

C) The Legend Tab



The **Legend** tab displays all the map data layers. The user can select or switch off any map layer. The **Update** button regenerates the map and displays a new map after switching on or off map layers.

D) The Query Page

The **Perform Query** option on the Tools Tab opens the query page shown on the next page. Users can query all the map layers. The most important queries are on livestock diseases (Diseases) and Livestock numbers (Census) or the location of a specific administrative layer (e.g. district – Admin 3). Querying diseases and livestock numbers can be done using four criteria, namely Disease, Species, any administrative layer (spatial) and Month and Year (temporal). This implies that the user can combine various criteria e.g. disease type, species, district, and year at the same time. The user has up to 35 different queries he can perform for different criteria combinations.

Select Layer

1. DISEASE : is equal to

2. SPECIES : is equal to

3. ADMIN3 : is equal to

4. DISEASE : is equal to

Diseases : is equal to

Diseases
Admin3
Census

Find

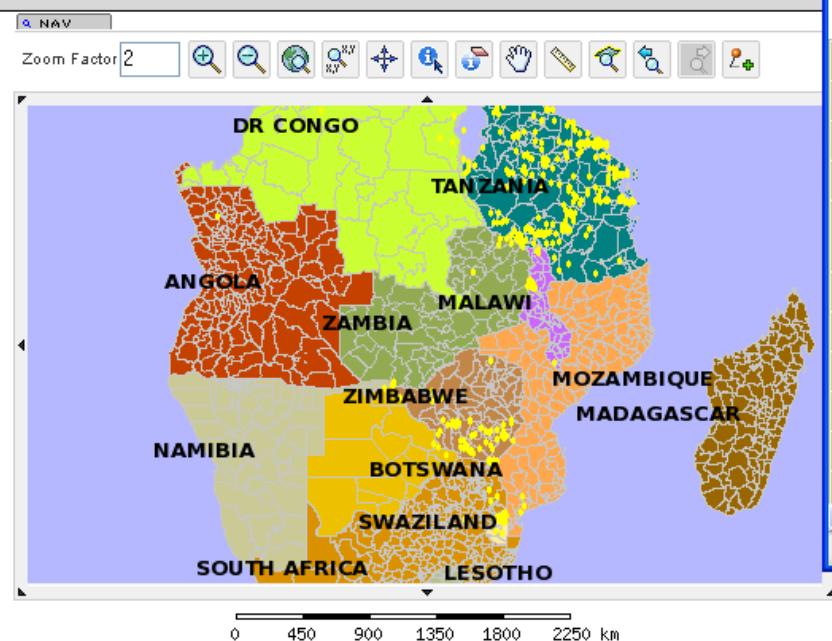
E) Query results

The query results are automatically displayed (as shown below) both in a table and on the map. The user can zoom to the query results using the map navigation tools.

Livestock Information Management System (LIMS)



Physical Information System (GIS) component of the SADC Livestock Information Management System developed by PRINT. It can query and visualise disease distribution and livestock numbers at different spatial scales in the SADC Region.



http://192.168.1.10:8080 - Search Results - Moz

File Edit View History Bookmarks Tools Help

Search results (463 found) for 'Diseases' that meet the following criteria: {DISEASE is equal to 'fmd'}

ID	DISEASE	SPECIES	ADMIN3
2517	FMD	Bov	MHALA DIT STRICT
2898	FMD	Bov	MATSILOJE
2899	FMD	Bov	RAKOP
3472	FMD - SAT2	Bov	Kasane
3473	FMD	Bov	PANDAMATENGA
3915	FMD	Bov	Selibe Phikwe
4045	FMD	Bov	Kasane
4046	FMD	Bov	Kasane
4047	FMD	Bov	Kasane
4408	FMD	Bov	KILIBA ONDS

Done

Users can further query each distribution point (location of disease outbreak) to get additional information. This can be achieved using the button (information) and clicking on individual points (the yellow points in the example above). The table like the one shown below will be displayed. Depending on the number of points selected or the distance between each of them, one or many rows of information will be displayed. The zoom-in function can be used to select the specific point of interest.

http://192.168.1.10:8080 - Query Results - Mozilla Firefox

EN English (United Kingdom) Microphone Tools X

Query Results

Admin3				
ADMIN1	ADMIN2	ADMIN3	SHAPE_INDEX	TILE_INDEX
Zimbabwe	Midlands	Gweru Rural	980	-1
Zimbabwe	Midlands	Shurugwi	987	-1
Zimbabwe	Matabeleland South	Insiza	988	-1
Zimbabwe	Midlands	Zvishavane Rural	993	-1
Zimbabwe	Masvingo	Chivi	995	-1

Queryresult

ID	MONTH	YEAR	DISEASE	SPECIES	NO_FOCI	LATITUDE	LONGITUDE	LOCALITY	ADMIN3	ADMIN2	ADMIN1	SH
46945	Oct	2004	FMD	Bov	1	-19.89000	29.84000	ZVISHAVAN	Zimbabwe	448	Zimbabwe	448
46946	Oct	2004	FMD	Bov	1	-19.89000	29.84000	SHAVAN	Zimbabwe	448	Zimbabwe	448
47028	Sep	2004	FMD	Bov	1	-19.97000	29.78000	MABIKA	Zimbabwe	452	Zimbabwe	452
47029	Sep	2004	FMD	Bov	1	-19.97000	29.78000	MABIKA	Zimbabwe	452	Zimbabwe	452

Done

Select A Country

abc Label Layers

Refresh Help

Map Units: Degree
Lat: -14.25
Long: 46.37

0 450 900 1350 1800 2250 km

Done

start Inbox - Microsoft... Symantec AntiVirus... LIMS Web GIS... Module 12 untitled - Paint 3 Firefox 14:59

ANNEX VIII – Some preamble before embarking on LIMS training

a/ language

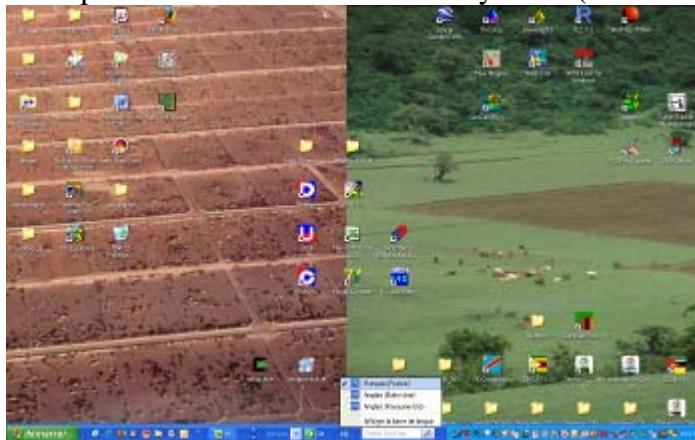
It is recommended to check for some language and numerical references (decimal issues) before starting with LIMS

Check visually the version of a keyboard you are using (external or integrated)

- QWERTY
- AZERTY
- QWERTY Portuguese etc..

1/ Do you have configured the equivalent on your laptop? If not do it

Example: This is for an AZERTY keyboard (French language in SADC)

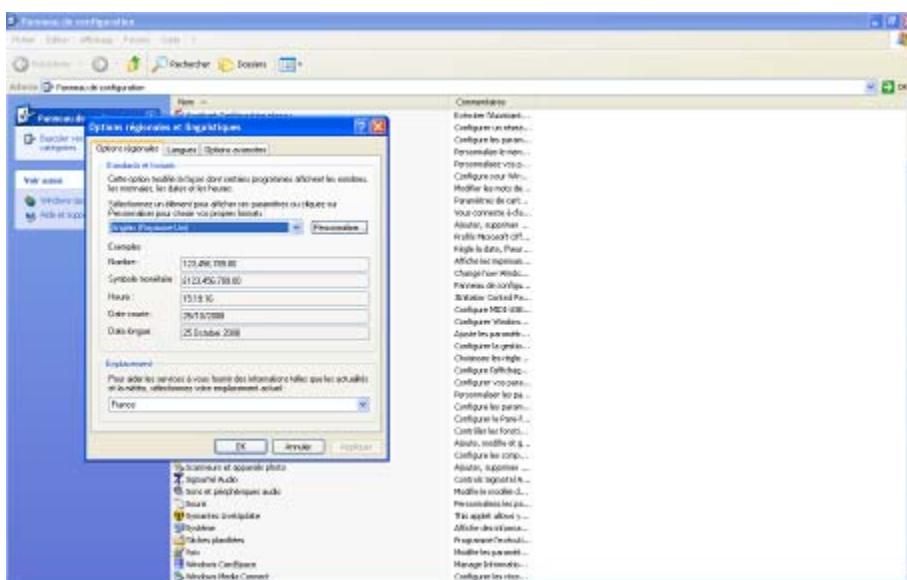


2/ Regional parameters for numerical data

LIMS works with English UK parameter where decimal is a dot

Check on control panel and set the regional parameters accordingly

We will then have to use a dot for a decimal (in general, a space is also provided for separation of thousands)



b/ access runtime

**Install of the Access 2003 runtime for PC non equipped with MS Access 2003 or 2007
Installation du runtime MS Access pour les PC non équipés de MS Access 2003 ou 2007
Instalação do Runtime Access 2003 para PC qui não são equipados com MS Access 2003 ou 2007**

English:

The Runtime for Access 2003 is available from the CD MS Office 2003. The runtime is found in the folder FILES\ACCRT. There are two files with the following names: accessrt.msi. Accessrt.Cab

One can also install the Access runtime for PC not running MS Office or MS Access 2003 (or version 2007). It can be downloaded from:

<http://msdn.microsoft.com/en-us/library/bb501030.aspx>

<http://www.microsoft.com/downloads/details.aspx?familyid=D9AE78D9-9DC6-4B38-9FA6-2C745A175AED&displaylang=en>

Français:

Le Runtime pour Access 2003 est disponible sur le CD original de MS Office 2003. Le runtime est présent dans le dossier FILES\ACCRT. Il y a deux fichiers : accessrt.msi. Accessrt.Cab

On doit installer le runtime Access 2003 pour les PC qui ne sont pas équipés de MS Office 2003 ou de MS Access 2003 (ou de la version 2007). On peut le trouver à l'adresse internet suivante :

<http://msdn.microsoft.com/en-us/library/bb501030.aspx>

<http://www.microsoft.com/downloads/details.aspx?familyid=D9AE78D9-9DC6-4B38-9FA6-2C745A175AED&displaylang=en>

Portuguese

O Runtime para Access 2003 é disponivel dentro do CD MS Office 2003. O runtime é presente na pasta seguinte FILES\ACCRT. Tem dois ficheiros com os nomes seguinte : accessrt.msi. Accessrt.Cab

Tambem se pode baixar e instalar os ficheiros do Runtime Access que são disponiveis no internet.. Para os computadores PC que não são equipados com MS Office 2003 ou MS Access 2003 (ou a versão 2007), é necessario instalar o runtime. Os ficheiros (versão inglesa) se encontram no sitio Internet seguinte de Microsoft:

<http://msdn.microsoft.com/en-us/library/bb501030.aspx>

<http://www.microsoft.com/downloads/details.aspx?familyid=D9AE78D9-9DC6-4B38-9FA6-2C745A175AED&displaylang=en>

ANNEX IX – List of Modules into LIMS

Liste des Modules et écrans (rapports types Excel) correspondants au système LIMS / *Lista dos Modulos e ecrã (relatorios tipo Excel) do LIMS / List of Modules and screens (SADC Harmonized templates) of LIMS*

- Headers / Timbre / Entête
- Module 1 *Numbers & Composition of Herds* / Effectivos animais do rebanho nacional / Effectifs nationaux – recensement animal
 - 1. *Nr by species* / effectivos animais por espécies / Nombre par espèce
 - 2. *Nr by economics* / effectivos animais por função económica / Nombre par fonction économique
 - 3. *Nr by breeds* / Effectivos animais por raça / Nombre par race
 - 4. *Nr by herd structure* / Effectivos animais por idade e sexo / Nombre par âge et sexe (démographie)
- Module 2 *Human Households & Population in Livestock farming* / Agregados familiares criadores / Ménage engagés dans l'agriculture et l'élevage
 - 1. *Human Population* / Agregados familiares / Ménages et population humaine
- Module 3 *Production Parameters* / Produção animal / Production animale
 - 1. *Slaughter* / Abate (carne) / Abattages
 - 2. *Milk* / Leite / Lait
 - 3. *Dairy products* / Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides, skins* / Curos e Peles / Cuirs et peaux
- Module 4 *Livestock & Products Price* / Preços dos productos animais / Prix des produits d'élevage et animaux vivants
 - 1. *Live animals* / Animal vivo / Animaux vivants
 - 2. *Meat products* / Producto de carne / Produits carnés
 - 3. *Milk products* / Leite e Lacticinios / Produits laitiers
 - 4. *Eggs* / Ovos / Oeufs
 - 5. *Hides & skins* / Curos e Peles / Cuirs et peaux
 - 6. *Fiber & feathers* / Fibras e plumas / Fibres animales et plumes
- Module 5 *Livestock & Products trade: import/export* / Importação e Exportação / Import et Export
 - 1. *Live Animals* / Animal vivo / Animaux vivants
 - 2. *L. stock Products* / Producto animais / Produits d'élevage
 - 3. *L. stock Inputs* / Inputs / Intrants de l'élevage
- Module 6 LS *Infrastructures* / Infra-Estructuras / Infrastructures

Generic Partitions / Divisões do pais / Divisions du pays

- 1. *Administrative* / Administrativa / Administratives
- 2. *Technical* / Tecnico / Techniques

Infrastructures Agreg. / Infra-Estructuras Agregados / Infrastructures description agrégées

- 3. *Dipping* / Tanque banheiros / Bain détiqueur
- 4. *Pens* / currais / Enclos de vaccination
- 5. *Vet clinics* / Clinicas vet. / Cliniques vétérinaires
- 6. *Govt Offices* / Officios do governo / Bureaux de l'état
- 7. *Mun Abattoirs & slabs* / Matadouros municipais e locais e casas de matança / Abattoirs locaux et tueries
- 8. *Milk Collection* / Recolha de leite / Récolte de lait liquide
- 9. *Livestock Markets* / Mercados / Marchés
- 10. *Storage Products* / Armazens / Entrepôts et Stocks

Infrastructures Detailed / Infra-Estructuras detalhados / Infrastructures détaillées

- 1. *Vet Diagnostic Labs* / Laboratorios / Laboratoires de diagnostic
- 2. *Vet Vaccine Labs* / Productores de Vacinas / Producteurs de vaccins
- 3. *Industrial Abattoirs* / Matadouros industrias / Abattoirs industriels

- 4.*Dairy Processing Plants* / Usina de transformação de leite / Unité de transformation laitière
 - 5.*Secondary Markets*, / Mercados secundarios / Marchés secondaires
 - 6. *Port of Entry & Exit* / Portos de entrada e saida / Postes d'inspection en frontière PIF
- Module 7 *Meat Inspection / Food safety* / Segurança Sanitaria dos alimentos / Sécurité sanitaire des aliments
 - 1. *Ante-mortem* / Inspecção ante mortem / Inspection ante mortem en abattoir
 - 2. *Post-mortem* / Inspecção post mortem / Inspection post mortem en abattoir
- Module 8 *Livestock Associations and Service Providers* / Associações de criadores e fornecedores de servicios / Association d'éleveurs et fournisseurs de services
 - 1.*Umbrella org & assoc* / Associações / Associations et Confédérations
 - 2.*Private companies* / Privado / Secteur privé
 - 3.*Government* / Publico / Secteur public
- Module 9 *LS related Laws, Regulation and Acts, policy docs* / Legislação e politicas agro pecuaria / Législation et documentsd e politique sur le secteur élevage
 - 1.*National Docs* / Nivel nacional / niveau national
 - 2.*International Docs* / Niveis internacional e regional (SADC) / Niveau international ou sous régional (SADC)
- Module 10 *Disease Outbreak notification* / Notificação dos surtos de doenças / Information sanitaire notification d'épidémies animales
 - *Outbreaks* / Epidemias focos / Foyers d'Epizooties animales
- Module 11 *Vaccinations* (e.g. TAD's) / Vacinação / Vaccinations
 - 1.*Vaccination* / vacinações efectuadas / Vaccinations effectuées (prophylactique et de contrôle)