

Risks to Agriculture in the Region and the need for reliable information

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Intro





- The Southern African Development Coordinating Conference (SADCC), established 1 April 1980
- Southern African Development Community (SADC) established on 17 August 1992 in Windhoek, Namibia
- 16 Members States ratified the SADC Treaty
- Population >385 million





SADC VISION 2050

“A peaceful, inclusive, middle to high income industrialised region, where all citizens & Member States enjoy sustainable economic well-being, justice & freedom.”

Cross Cutting Issues-Gender, Youth, Climate Change & Urbanisation

**Industrial
Development
& Market
Integration**

**Infrastructure
Development in
Support of
Industrialisation
& Regional
Integration**

**Social & Human
Capital
Development in
Support of
Industrialisation
& Regional
Integration**

Peace, Security & Good Governance





Sectors under FANR



Cereal Production 2014-2018 ('000 MT) (maize, wheat, soghurm, cassava and rice)



Country	2013/14	2014/15	2015/16	2016/17	2017/18
Angola	1,820	2,017	2,374	2,820.6	3,608.93
Botswana	260	90	54.6	94.4	66,09
Comoros	-	-	-	-	-
DRC	2,797	3,127	3,258	3,378.2	-
Eswatini	119	94	34	107.4	
Lesotho	104	89	27	238.4	75,40
Madagascar	4,344	4,052	4,530		-
Malawi	3,978	4,052	2,532	3,487	3,027
Mozambique	2,510	2,845	2,389	2,754.7	3,173
Namibia	132	68	80	144	135
South Africa	16,940	12,206	9,323	18,157.6	14,790.5
Tanzania	9,829	8,919	10,139	9,388.8	9,386.0
Zambia	3,644	2,898	2,944	3,888.6	2,597.8
Zimbabwe	1,719	868	638	2,443.1	1,994.2
SADC*	48,196	40,275	38,274	46,898.65	38,855.8



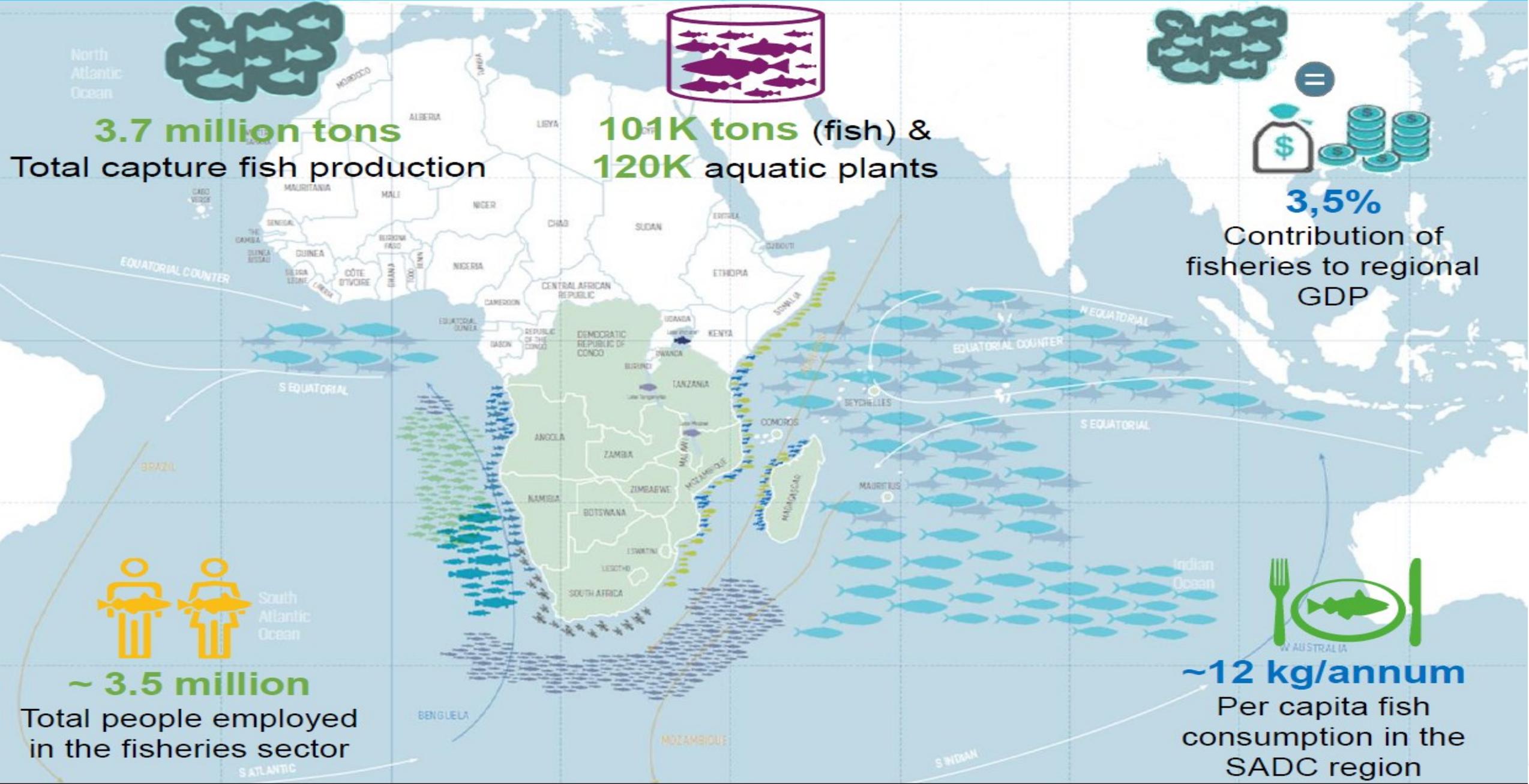


Livestock Populations, Millions

Cattle	79.4
Sheep	47.3
Goats	48.3
<i>Subtotal sheep goats</i>	95.6
Pigs	31.1
Equines	2.3
Poultry	450.7



Quick SADC Fish Facts



North Atlantic Ocean

3.7 million tons
Total capture fish production

101K tons (fish) & 120K
aquatic plants

3,5%
Contribution of fisheries to regional GDP

~ 3.5 million
Total people employed in the fisheries sector

~12 kg/annum
Per capita fish consumption in the SADC region

Others

- Natural resources – wildlife and game farming (mice eating habits), apiculture, etc
- Sugar production, tobacco production and other related
- Tourism related agriculture activities
- Forestry and Trans frontier conservation areas
- And many others





Risks



1. Climate Change effects

- Unpredictable rainfall patterns, late, not enough or out of season
- Until late 2024/early 2025, most of the region have been experiencing normal to below normal rainfalls, and also
- Increased and prolonged dry/drought periods
- increasing intensity and frequency of climate shocks- floods, cyclones, wildfires



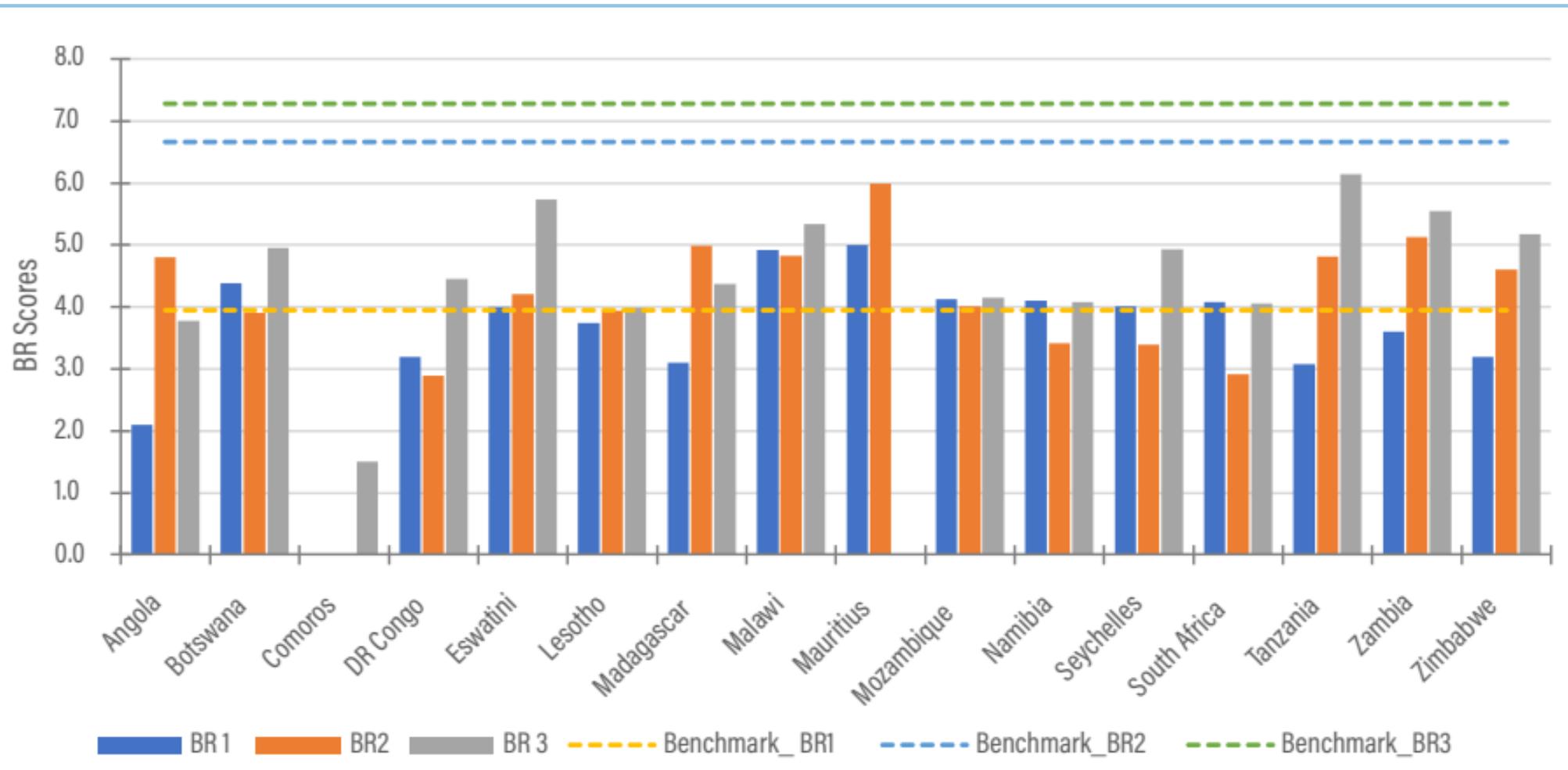
2. Effects of COVID-19

- A great diplomatic way to explain diminishing agricultural investment and financing by all stakeholders

Table 1: Overall CAADP Biennial Review performance by SADC countries as a whole across the seven Malabo Declaration commitments over the three Biennial Review cycles.

Malabo Declaration commitment	Biennial Review			Percentage change between BR2 and BR3	BR3 Benchmark	Status
	1 (2017)	2 (2019)	3 (2021)			
1. Commitment to CAADP principles	5.36	7.42	7.14	-3.78	10.00	Not on track
2. Enhance agricultural finance	3.97	4.22	4.15	-1.66	7.500	Not on track
3. End hunger by 2025	2.05	2.51	3.03	20.73	6.32	Not on track
4. Eradicate poverty through agriculture	2.36	1.29	2.14	65.53	5.81	Not on track
5. Boost intra-Africa trade	2.65	2.66	2.62	-1.39	5.00	Not on track
6. Enhance resilience to climate change	3.63	4.81	5.98	24.47	8.00	Not on track
7. Mutual accountability	5.59	7.04	6.74	-4.34	8.33	Not on track
Overall	3.77	4.25	4.54	6.80	7.28	Not on track





3. Other related Factors

- Russia-Ukraine situation
- Increased urbanisation (population growth)
- Changing dietary preferences
- Diminishing natural resources,
- Lack or slow implementation of climate mitigation interventions

All of above contribute to increasing food demand putting pressure on production e.g. in sub-Saharan Africa (SSA) , food production will need to increase in the range of 60-80% in order to meet the projected three-fold rise in cereal demand where population is estimated to reach 2.2 billion by 2050



Summary of risks

- 3Cs - Climate change
 - Covid 19
 - Conflict in Russia-Ukraine





Impacts





Macro level – increased
food insecurity



Number of people food insecure in Southern Africa for the period 2022/2023

Country	5yr avg (2017-2021)	2021/22	2022/23
Angola	1 131 091	1 584 000	853 108
Botswana	31 931	36 000	37 000
Comoros	-	-	-
DRC**	15 370 000	27 000 000	26 400 000
Eswatini	243 160	336 000	258 800
Lesotho	472 000	470 000	521 000
Madagascar	1 045 464	1 640 000	1 535 000
Malawi	1 949 308	1 653 000	3 822 502
Mauritius	-	-	-
Mozambique	1 414 011	1 858 000	3 145 750
Namibia	658 588	750 313	376,000
Seychelles	-	-	-
South Africa	13 700 071	13 600 000	14 400 000
Tanzania	446 066	592 000	839 000
Zambia	1 383 531	1 575 154	1 952 123
Zimbabwe	3 480 563	2 943 000	3 820 000
SADC	41 325 784	54 037 467	57 823 635



Major transboundary plant pests and diseases in SADC

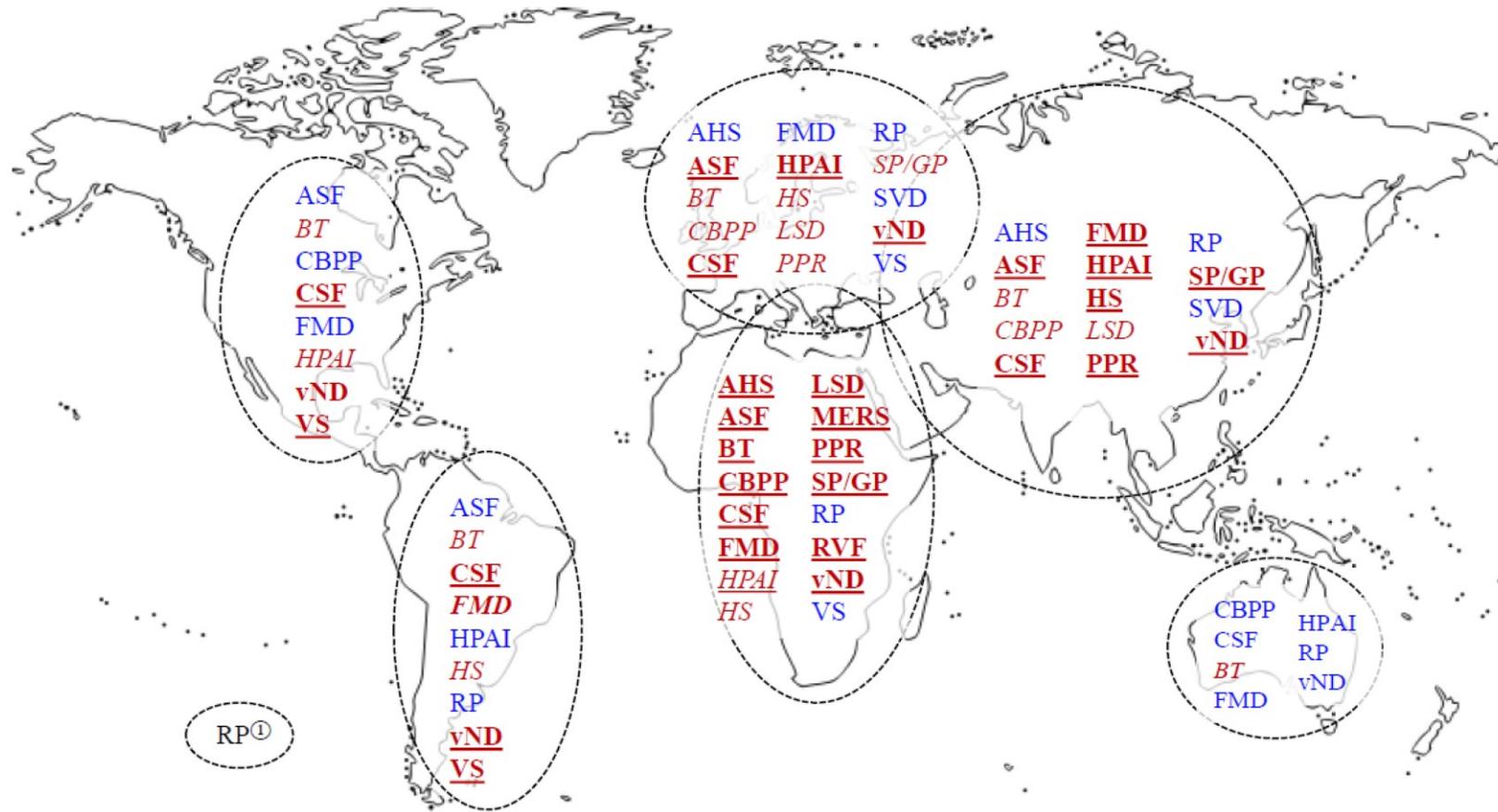


Member States	FAW	Tuta absoluta	Fruitfly (B. Dorsalis)	Banana Bunchy Top Virus (BBTVD)	Fusarium Oxysporum TR4	Maize Lethal Necrosis Disease (MLND)	Citrus greening
Angola	Yes	Yes	Yes	Yes	Yes	No	No
Botswana	Yes	Yes	Yes	No	No	No	No
Comoros	-	-	-	-	-	-	No
DRC	Yes	Yes	Yes	yes	No	yes	No
Eswatini	Yes	yes	Yes	No	No	No	No
Lesotho	No	Yes	No	No	No	No	No
Madagascar	Yes	Yes	Yes	No	No	No	Yes
Malawi	Yes	yes	yes	yes	No	No	yes
Namibia	Yes	yes	yes	No	No	No	No
Mauritius	Yes	yes	yes	No	No	No	No
Mozambique	Yes	yes	yes	yes	yes	No	No
Seychelles	Yes	yes	No	No	No	No	No
South Africa	Yes	yes	yes	yes	No	No	No
Tanzania	Yes	yes	Yes	Yes	No	Yes	no
Zambia	Yes	Yes	Yes	Yes	No	No	No
Zimbabwe	Yes	Yes	Yes	No	No	No	No





Broad Continental Distribution of 17 Transboundary Animal Diseases



Areas where disease has occurred, but is not currently reported
 Areas where disease or causative agent is currently present
 (endemic/enzootic, recent or sporadic outbreaks)

① Natural RP declared eradicated in 2011, virus remains stored in laboratories.

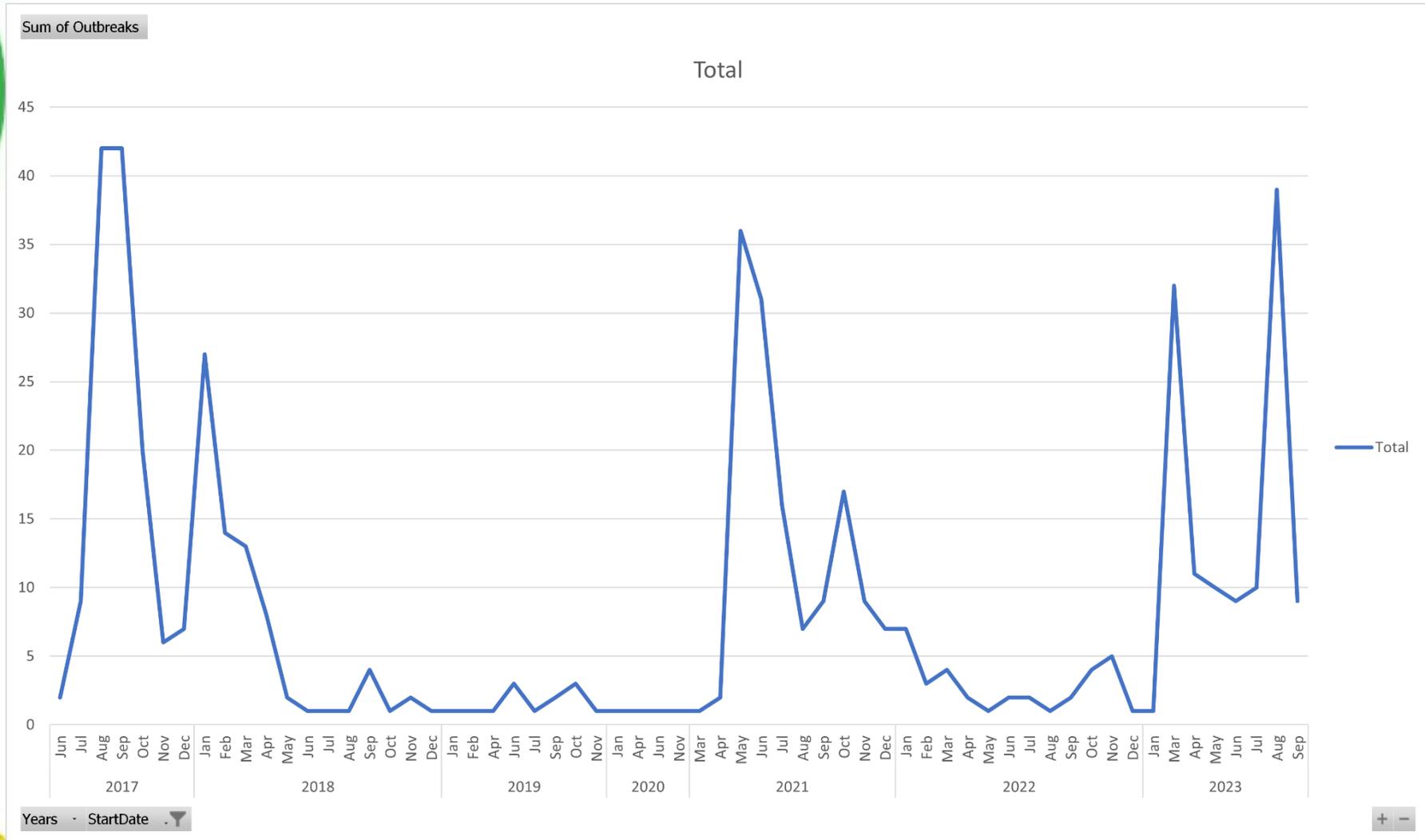


Highly Pathogenic Avian Influenza (HPAI) and SADC

- 2016 – H5 outbreaks in wild and domestic birds around the shores of Lake Victoria in Uganda
- May 2017 – 3 SADC MS reported H5 outbreaks, DRC, Zimbabwe and eventually RSA
 - ✓ Discussed at Sectoral Ministers of Agric meeting held of 19 May 2017, Eswatini
 - ✓ Emergency LTC meeting 2 to 4 August 2017, Pretoria
 - ✓ Council of August 2017, Pretoria
 - ✓ DRC reported the disease had affected 22,000 chicken and ducks, killing 14,000 around Lake Victoria. South Africa reported the disease had affected 813,000 breeding stock and backyard chickens; and Zimbabwe reported the disease in two farms affecting >200,000 breeding stock chickens.
 - ✓ production losses in three affected Member States including loss of both table and hatching eggs was estimated at US\$810 million. In addition, there have been more than 300 jobs lost and other socioeconomic losses as a result of movement restrictions.
 - ✓ Since then other MS also reported outbreaks
 - ✓ Most MS managed to control outbreaks



RSA AI OUTBREAKS FROM 2017 TO CURRENT





Epizootic Ulcerative Syndrome (EUS) and SADC (2020)



Botswana, Malawi, Mozambique, RSA, Zambia (Namibia?)

Affecting, catfish, tilapia, tail fin and others



EUS in Malawi...

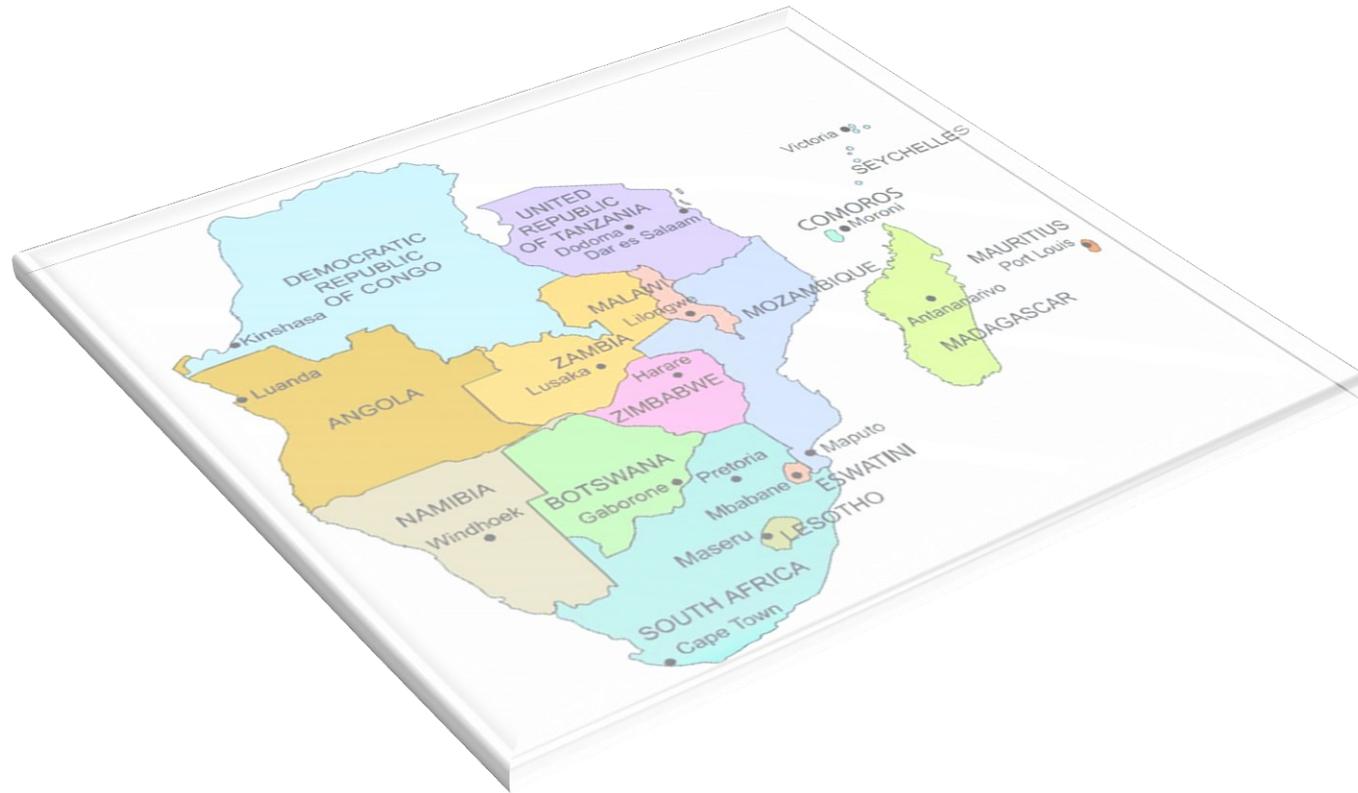
- ✓ In Malawi surveys were conducted in Mchinji, Kasungu, Salima & Lilongwe & from where Bua river empties into Lake Malawi up Tongole camp in Nkhotakota Game Reserve
- ✓ Disease was spreading to all the areas except for Nkothakotha & is affecting the entire Bua river system from Mchinji, Kasungu, Ntchisi & Dowa
- ✓ The investigations revealed no significant EUS suggestive lesions from the Bua-Lake Malawi entry point, but at Tongole 9 of the 17 *Labeo cyrindlicus* that were sampled using a mono filament gill net presented the red spots



Current initiatives

- SADC programs – RAP and RAIP
 - Strategies for management of transboundary animal and pests
 - Strategies for increased production and productivity
 - AIMS
- SPGR management (PGRC) and AnGr Strategy
- HRRS
- DRR and SHOC – for preparedness, response and early recovery against disasters
- CSA and SARCOF monitoring and briefs
- Cyclone watch

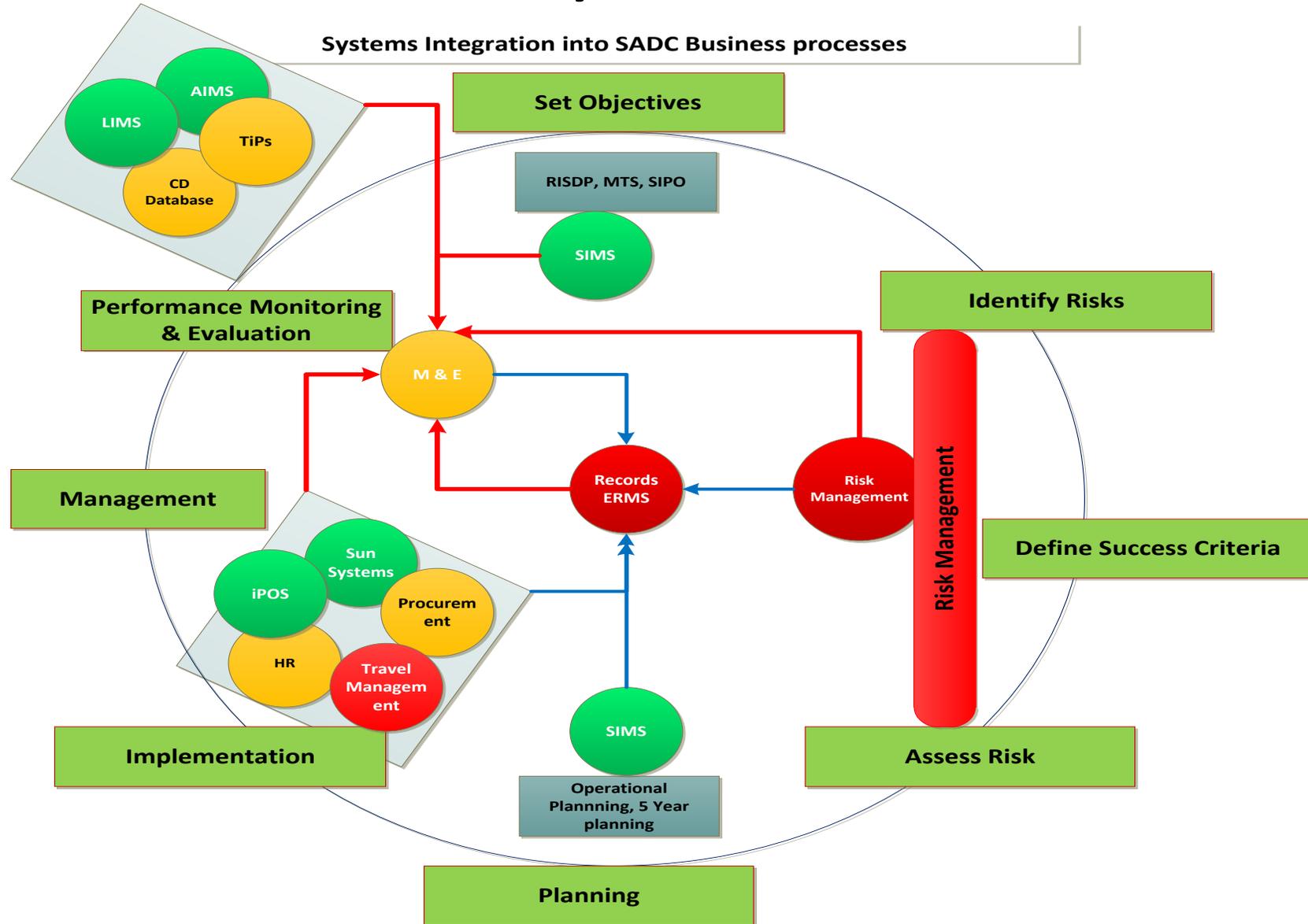




SADC AIMS and LIMS



@SADC and data systems





Intro

1. Agricultural Information Management System(AIMS)

2. Livestock Management System(LIMS)

❖ Integral components of the FANR initiated for **monitoring system** and **tracking** the **implementation** of :

1. the Regional Indicative Strategic Development Plan (RISDP),
2. [Dar-es-Salaam Declaration on Agriculture and Food Security](#),
3. Relevant SADC protocols, commitments and
4. The Regional Agricultural Policy (RAP)

❖ Data collection on KPI is a means of monitoring progress towards targets



Intro contd

- ❖ Provide policy makers and programme developers access to **reliable, accurate** and **up to date** information that is necessary for **policy development, emergency preparedness, planning, and decision making** in the context of programme management





[Sign In](#)



AIMS

Agricultural Information Management System

STO SAR

Support Towards the Operationalization of the SADC Regional Agriculture Policy (STOSAR). FAO EDF 11 Project GCP/SFS/004/EC

Produced with funding from the European Union.

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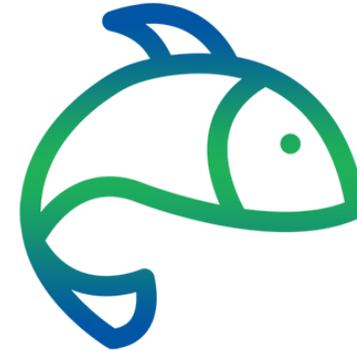
AIMS Modules



Public Finances



Crops



Aquaculture



Livestock



National Accounts



Forestry

12 modules in total





Harmonized Data Collection

1
2
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4
5 **2. Core livestock items**
6
7 2.1. Number of animals
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Header Content Instructions Legend Contacts

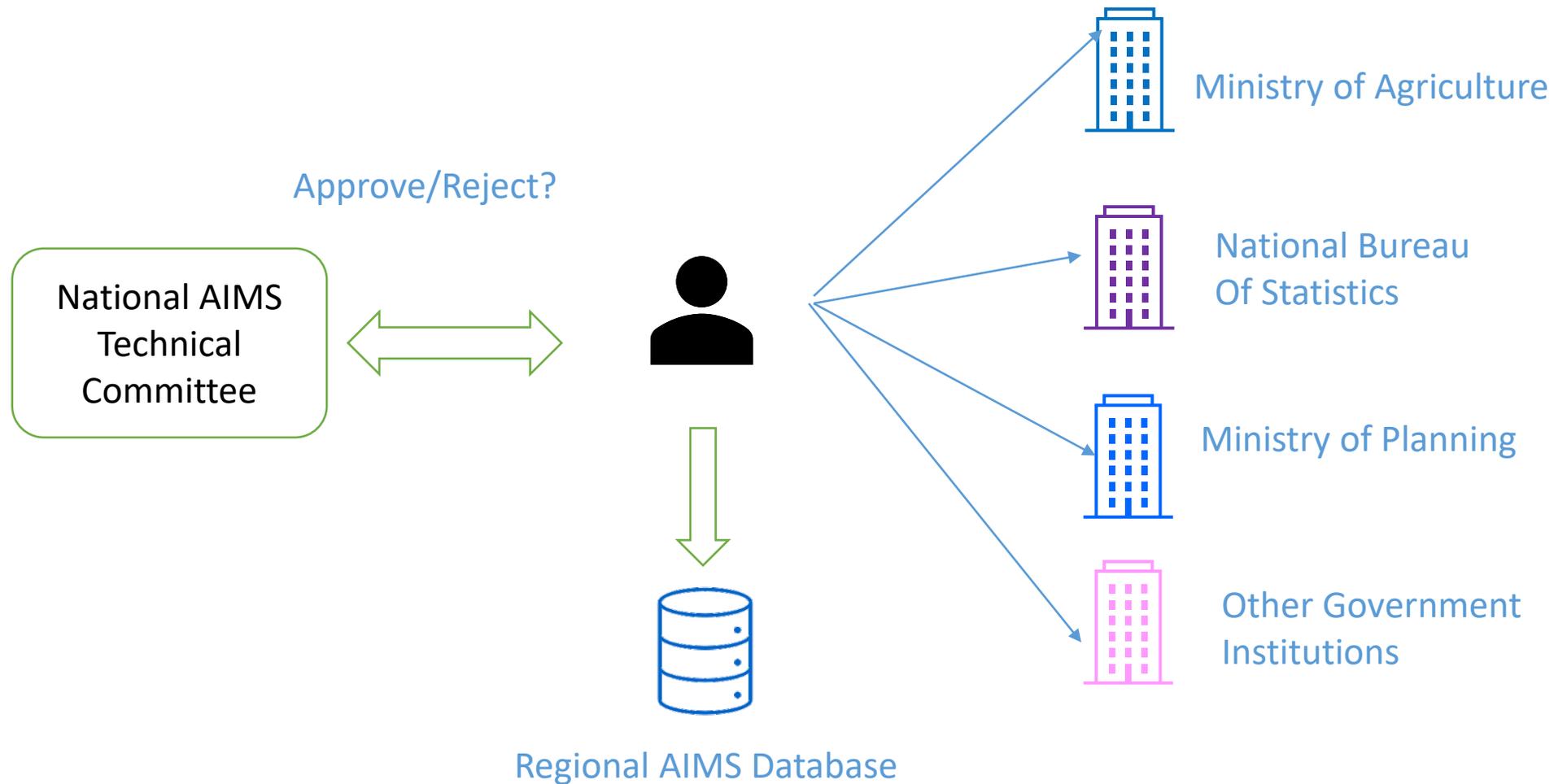
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cattle	Annual Total										
	Females										
	Birth numbers										
	number of loss recorded										
	Numbers slaughtered										
Sheep	Annual Total										
	Females										
	Birth numbers										
	Numbers slaughtered										
Pigs	Annual Total										
	Females										
	Birth numbers										
Goats	Numbers slaughtered										
	Annual Total										
	Females										
	Birth numbers										
	Numbers slaughtered										

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Data collection



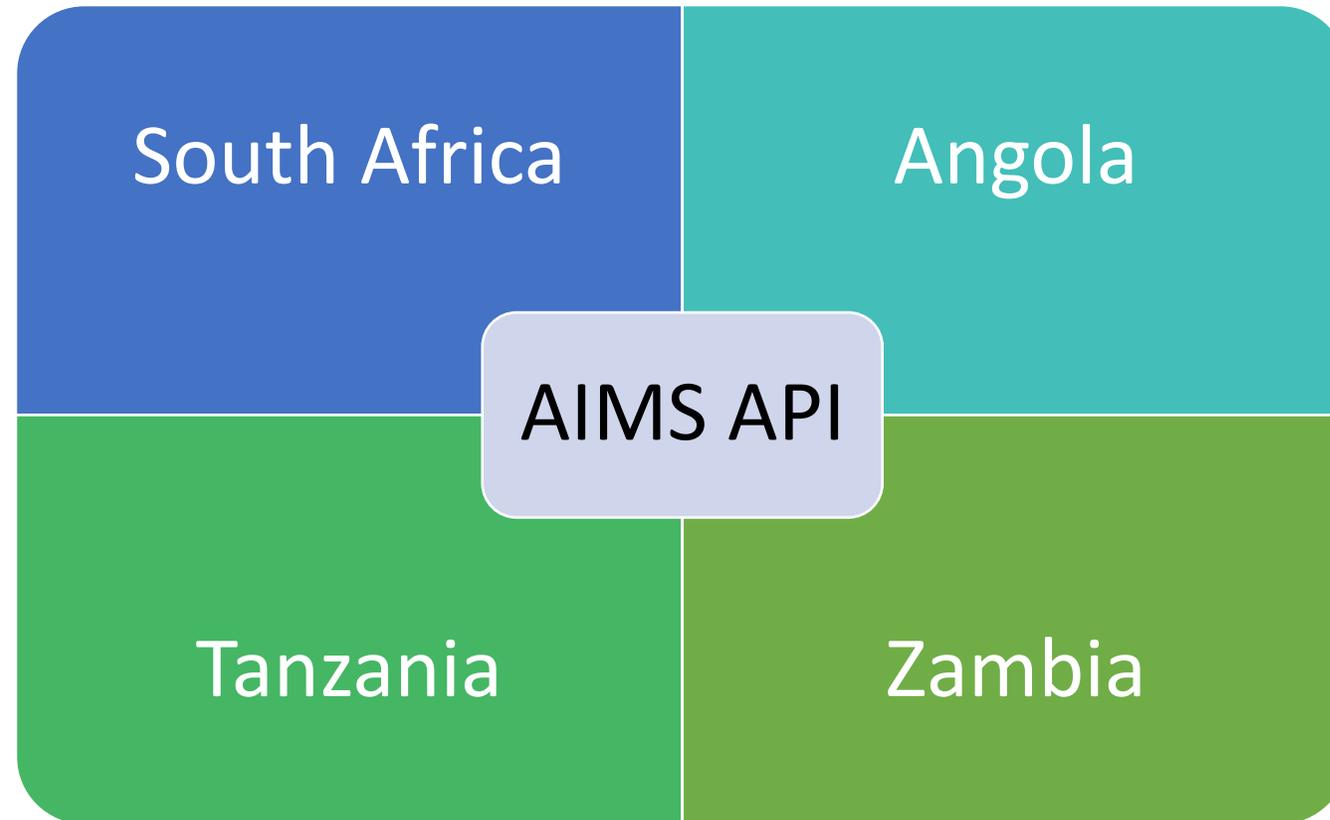


AIMS Status

- Information instantly accessible to SADC citizens, policy-makers, senior government officers, researchers, media, academia, civil society organizations, development partners,



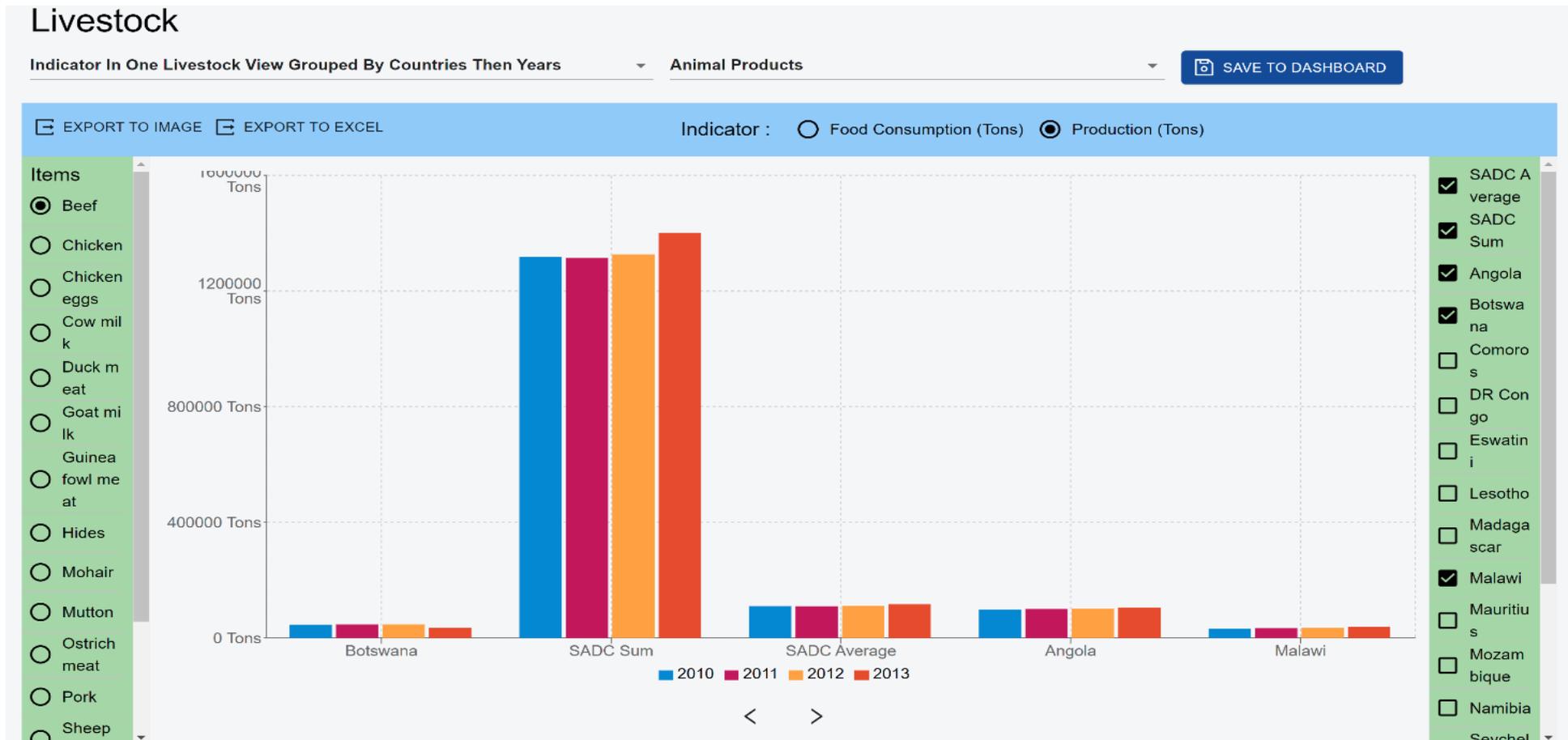
Application Programming interface (API) Ready



AIMS Benefit - Regional integration Zambia pilot



AIMS Benefit – Indicators for market access



AIMS next steps

- Integration with local systems that have the infrastructure readily available
- Capacity building to increase adoption of the platform
- Continued Data collection





SADC Livestock Information Management System (LIMS)





Components/Modules of the System

❖ **LIMS is the component of AIMS dealing with the livestock sector.**

- first component of AIMS to be comprehensively designed and developed with almost all sectors in livestock being considered
- LIMS is not just a database or application but a **system** for collecting, collating, analysis and sharing regional livestock information.

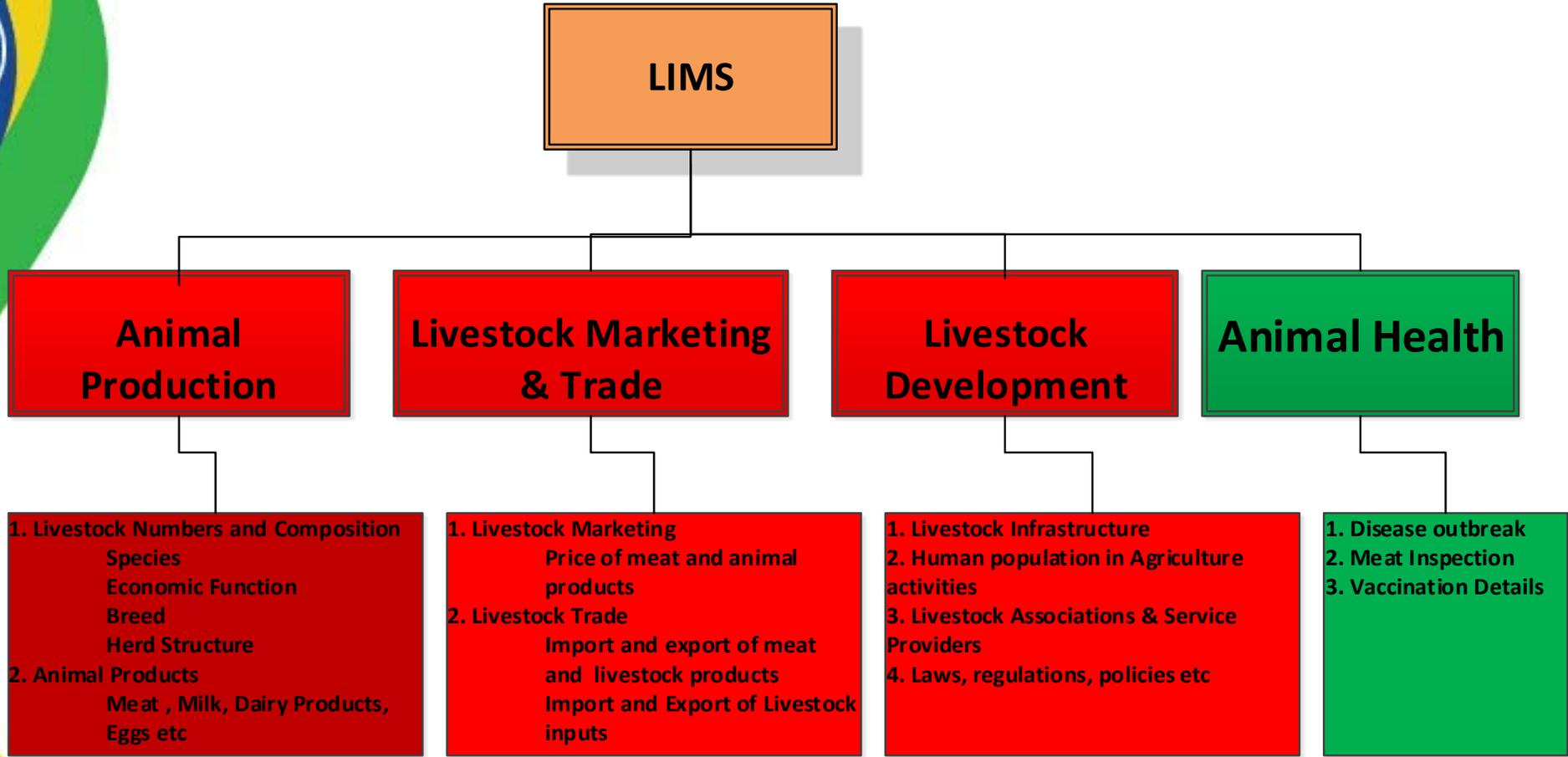
❖ **LIMS Structure**

- National LIMS Database deployed in MS to collect data
- Regional LIMS





LIMS Modules



Not being used

Being used

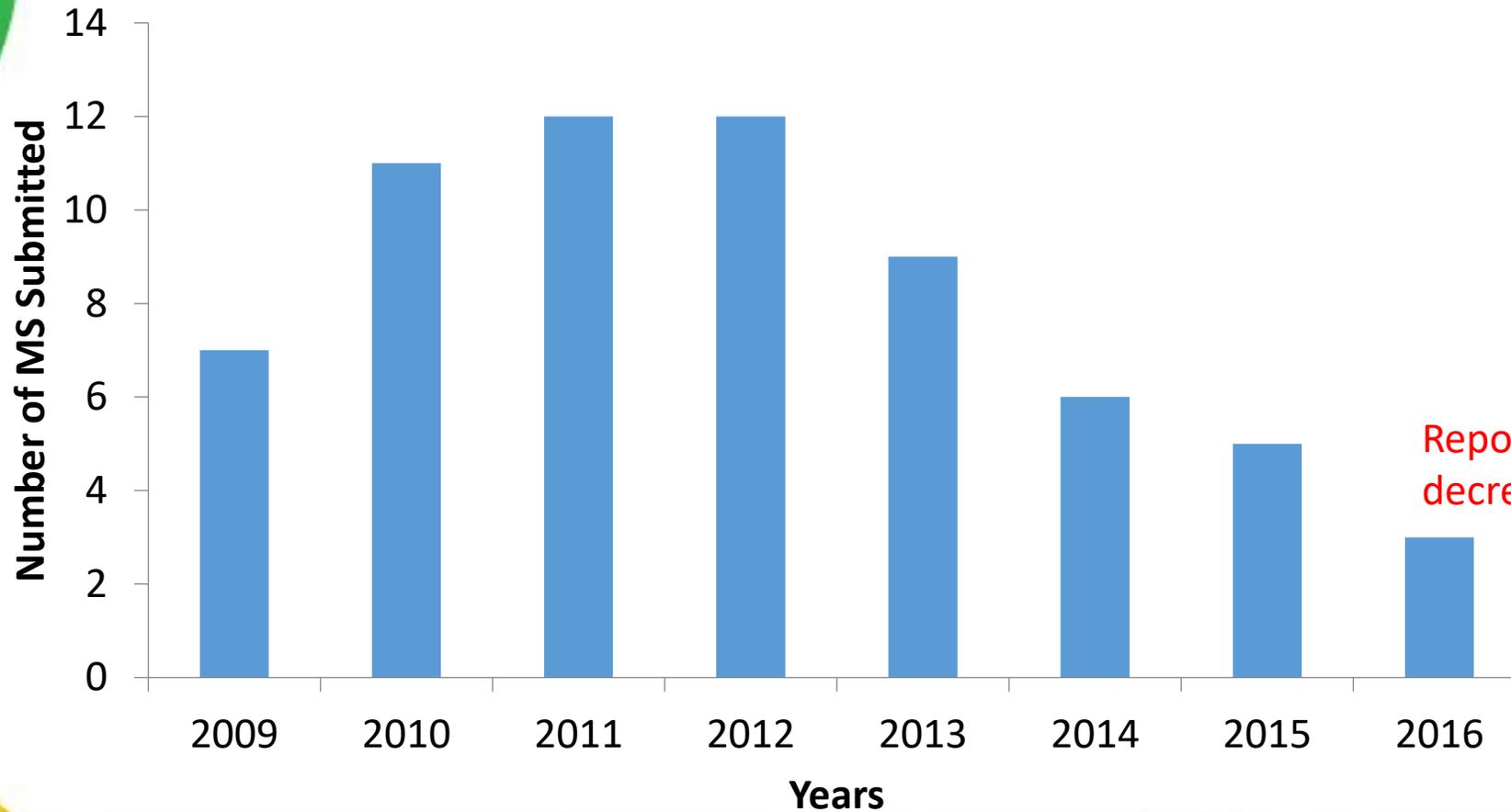


System Implementation

	Country	Version	Comments
1	Angola	Non	
2	Botswana	LIMS 3.0	
3	DRC	None	
4	Lesotho	LIMS 2.0	
5	Madagascar	NN	
6	Mauritius	NN	
7	Malawi	LIMS 2.0	
8	Mozambique	LIMS 2.0	
9	Namibia	LIMS 3.0	
10	Seychelles	NN	
11	Swaziland	LIMS 3.0	
12	Tanzania	LIMS 3.0	
13	South Africa	LIMS 2.0	
14	Zambia	LIMS 2.0	
15	Zimbabwe	LIMS 2.0	



Submission of reports in the system

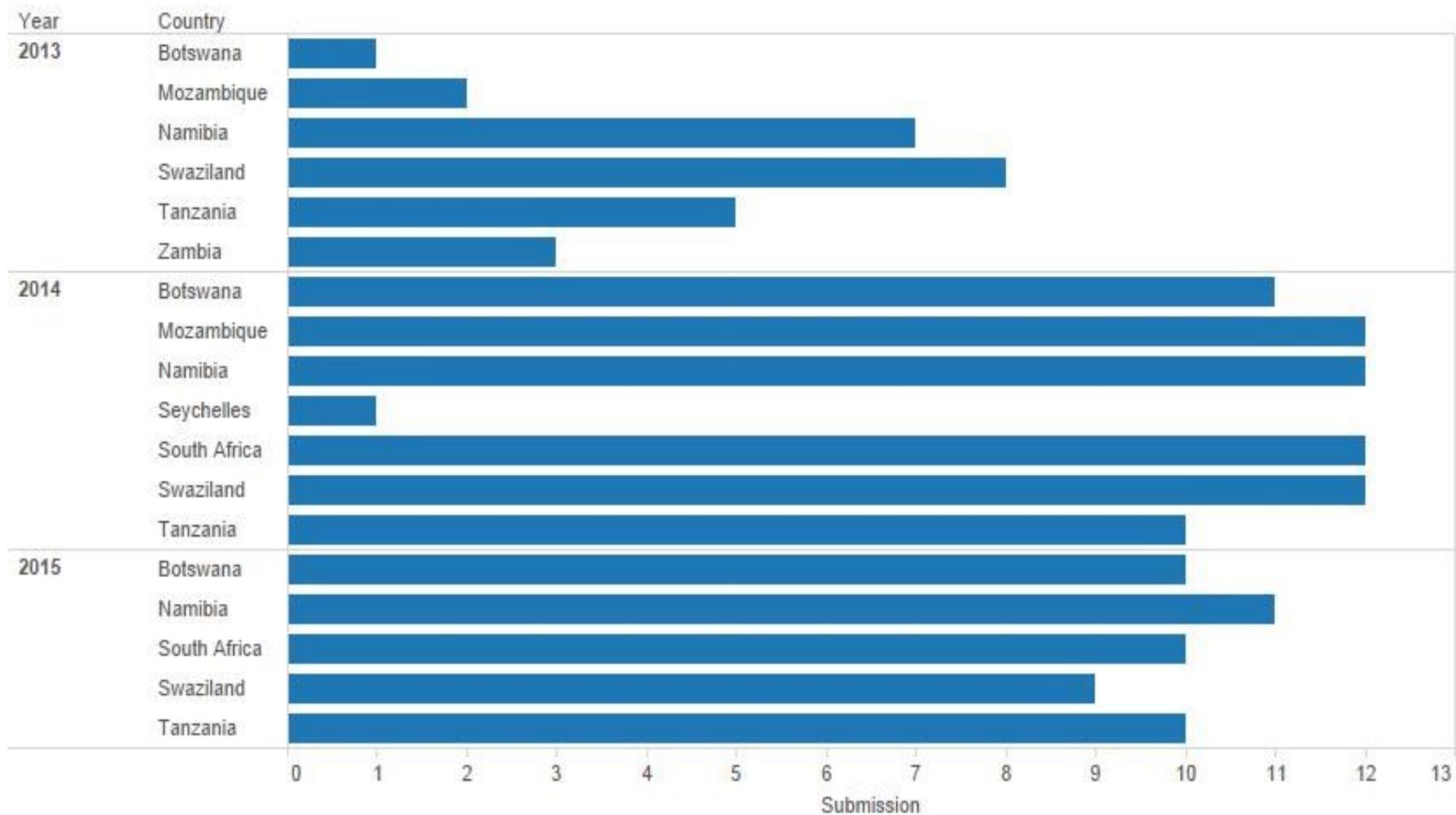


Reports submitted to SADC decreasing over the years



Report Submission Status

Status of report Submissions by Member States



Sum of Submission for each Country broken down by Year. The data is filtered on Year, which ranges from 2013 to 2015.



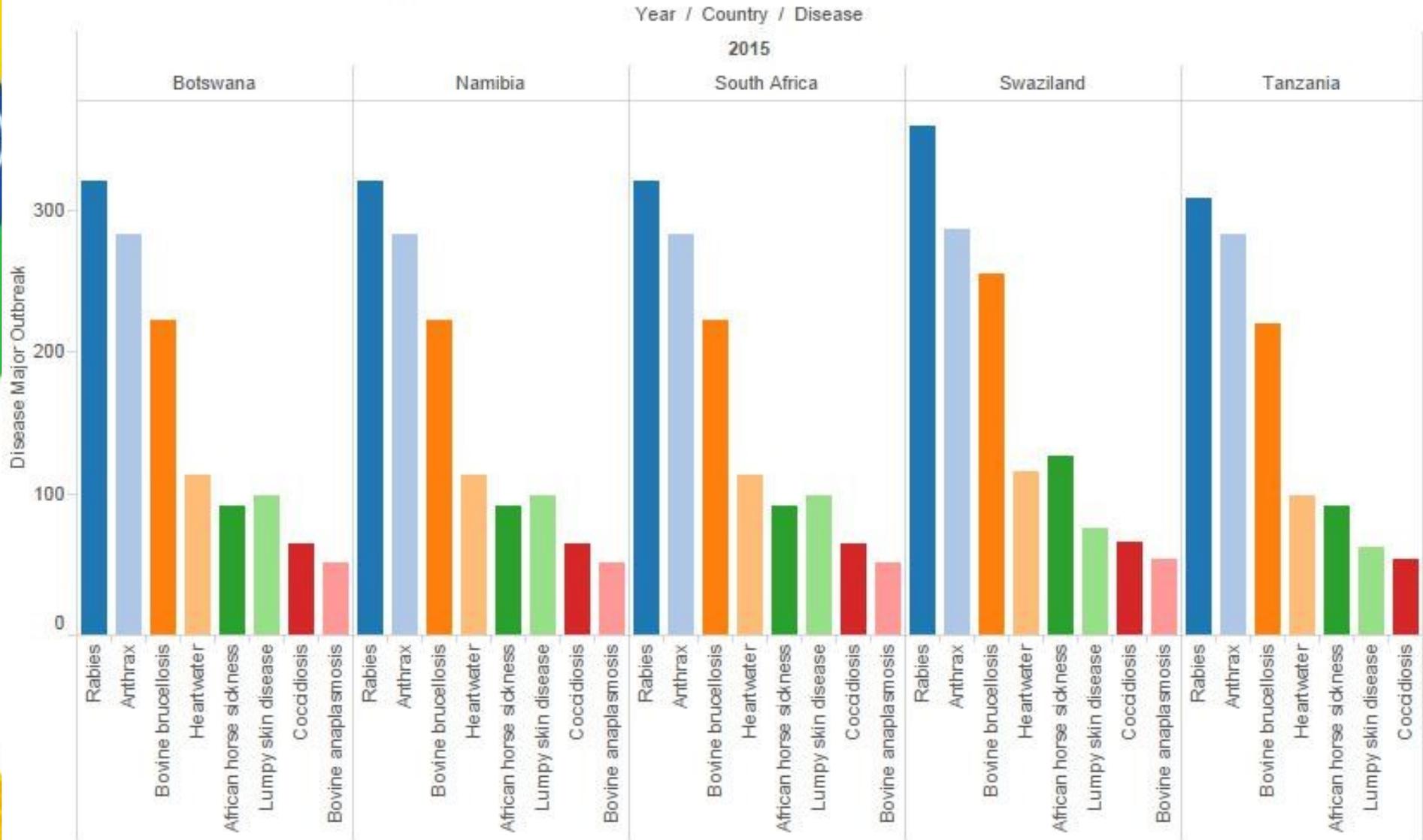


reports examples





Major Disease Outbreaks throughout the Year

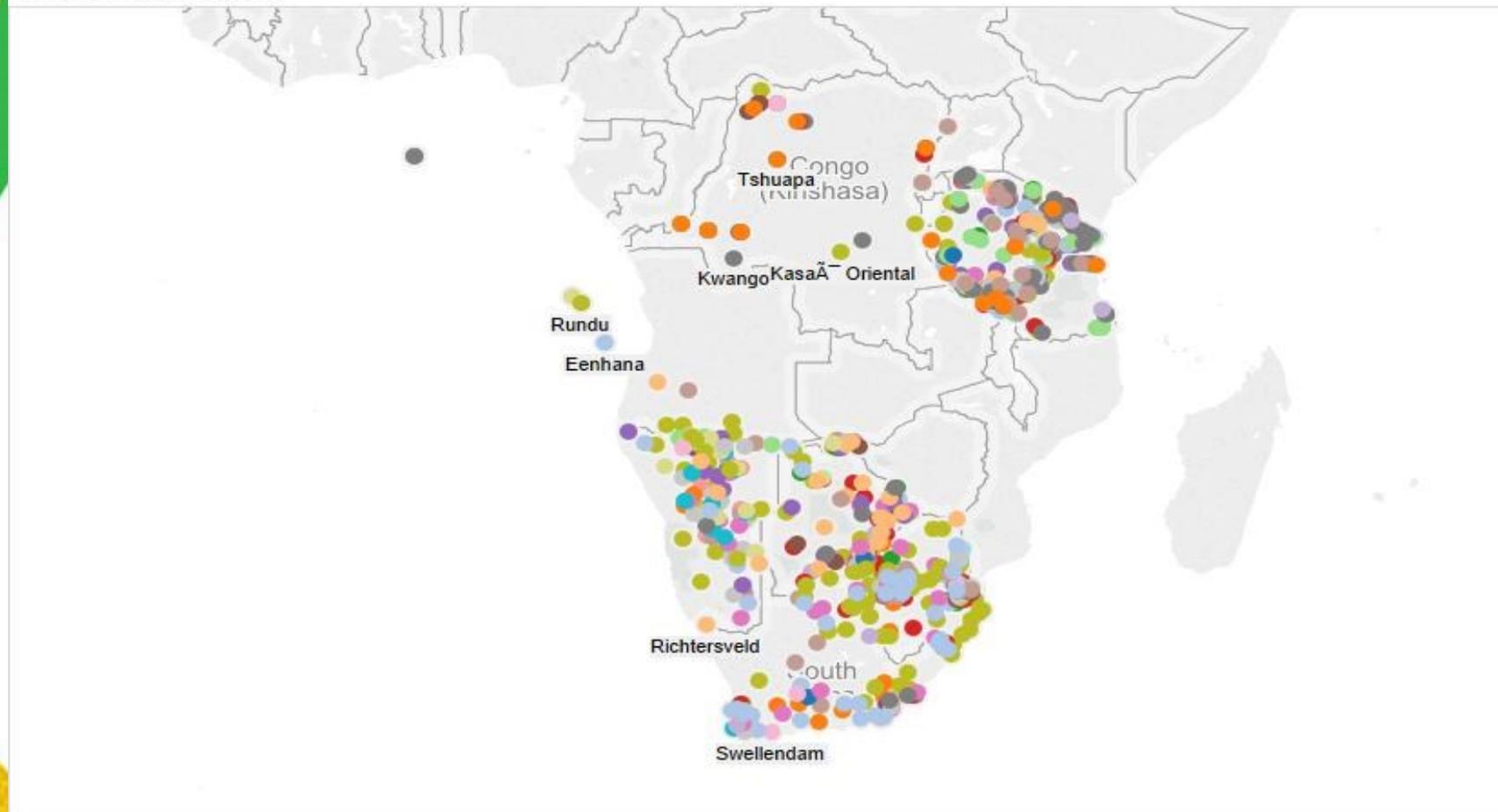


Sum of Disease Major Outbreak for each Disease broken down by Year and Country. Color shows details about Disease. The view is filtered on Year and sum of Disease Major Outbreak. The Year filter keeps 2015. The sum of Disease Major Outbreak filter ranges from 50 to 360.



Regional Status 2015, based on submitted data

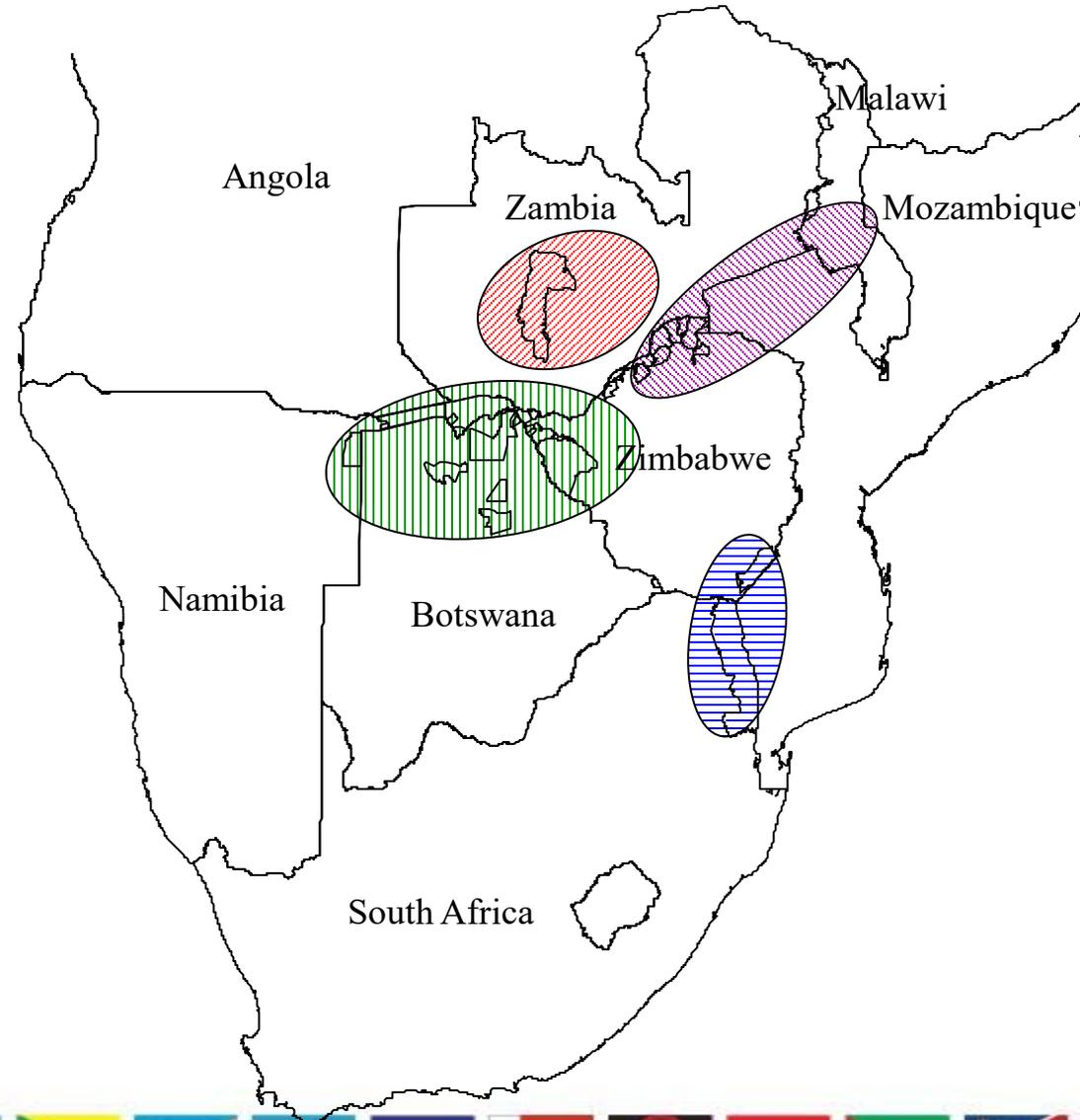
Disease Distribution



Map based on average of Longitude and average of Latitude. Color shows details about Disease Name. The marks are labeled by Partition Name. The data is filtered on Year and Country Name (Vw Country). The Year filter keeps 2014 and 2015. The Country Name (Vw Country) filter keeps 15 of 15 members.



FMD and SADC



Challenges

1. Most MS are no longer reporting in time. Some of the reports are received just before LTC Meetings
2. Utilization of the system is not optimal
3. Majority of MS did not receive technical assistance after upgrade to LIMS 3.0
4. Multiple transactional and reporting systems in MS results in a burden for operational staff
5. Discontinuity and knowledge transfer on the system





Of interest

- Data collection continuity and ensuring data is live, farmer, extension officer, govt official, regional
- Robustness of data to be predictive and also reflect other dynamics like climate change
- Evolving data systems?
- **HOW DO WE STIMULATE REPORTING**



Whats Next

- Revitalise LIMS through STOSAR II (and AMDS expected to be cojoined with LIMS)
- Capacitate MS to improve reporting and use all modules of LIMS
- Quarterly and yearly reporting





THANK YOU
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ASANTE
MERCİ



Baie Dankie





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