



African Union

Interafrican Bureau for Animal Resources

DISEASE REPORTING USING ARIS2

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AU-IBAR

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Introduction

- **The importance of data and information cannot be over-emphasized:-**
 - Planning and decision making; Advocacy to attract/promote investment; Promotion of trade; Meet International obligation etc
 - Available data and indicators are often inadequate for decision makers to formulate good policies; and efficient and equitable public and private sector investments



Problem statement and Questions

- **Lack of Information as a constraint to Livestock development, livelihood and food security**
- **Most Member States (MS) of AU have no reliable IS capable of contributing to the planning process;**
 - The few that have – Poor quality data
 - No systematic data collection, analysis & information dissemination
 - Major focus on disease reports to international organisations
- **Data from different sources and sectors was fragmented**
- **Disconnect between Data and Policy**
- **What type of Data do we really need?**
- * **Not collected does not mean that it is not there or it is not important**



African Union Interafrican Bureau for Animal Resources (AU-IBAR)

- AU IBAR is a technical arm and specialized office of the DREA of the AUC – whose responsibilities include:
 - Providing advisory service, promotion of policy & advocacy, capacity enhancement & development of programmes on matters related to the development and use of animal resources in Africa.
 - 6 Strategic programmes:-
 - TADs and Zoonosis
 - Natural Resource management
 - Investment and Competitiveness
 - Standards and Regulations;
 - Policies and Capacity building; www.au-ib.org
 - Knowledge management



New SP 2014 – 2017

- AH, disease prevention and control systems;
- Animal resource production systems and ecosystem management;
- Access to inputs, services and markets;
- Animal resource information and knowledge management



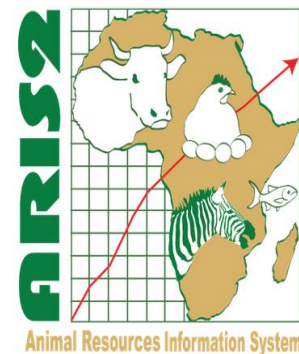
ARIS-2

- **AU-IBAR Strategic programme 4:-** Improving knowledge management in animal resources to facilitate informed and timely decision making
- **Objective:-** *“To collate, analyse and make available in a timely manner, reliable and up to date data, information and knowledge on animal resources to support planning and decision making”*
- **Goal:-** to help position AU-MS, RECs & AU-IBAR as primary & reliable sources of comprehensive African animal resources information
- **ARIS** - Regular program within Knowledge Management strategy of IBAR



ARIS-2

- A platform and a system
- Broad based Information system covering all areas of animal resources – Animal Health, Animal production, Fisheries, Wildlife, Marketing & Trade, Infrastructure, Human resources, budget etc
- Platform for use by all relevant sectors of the economy
- Flexible, customisable, user friendly; Interoperable etc



The African Union Inter-African Bureau for Animal Resources (AU-IBAR) is a specialized technical office of the Department of Rural Economy and Agriculture of the African Union Commission. AU-IBAR's mandate is to support and coordinate the utilization of livestock, fisheries and wildlife as resources for both human wellbeing and economic development in the member states of the African Union. In order to achieve its objectives, AU-IBAR requires qualitative, complete and timely animal resources information for monitoring, planning and decision making. The value of evidence-based and scientific information in every aspect of development cannot be overemphasised.



In line with its mandate and Strategic Plan, AU-IBAR has developed an information system known as the Animal Resources Information System (ARIS) whose goal is to help position AU-IBAR at the continental level, the Regional Economic Communities (RECs) at the regional level and the Member States (MSs) at the local level as the core and reliable sources of comprehensive animal resources information in Africa.

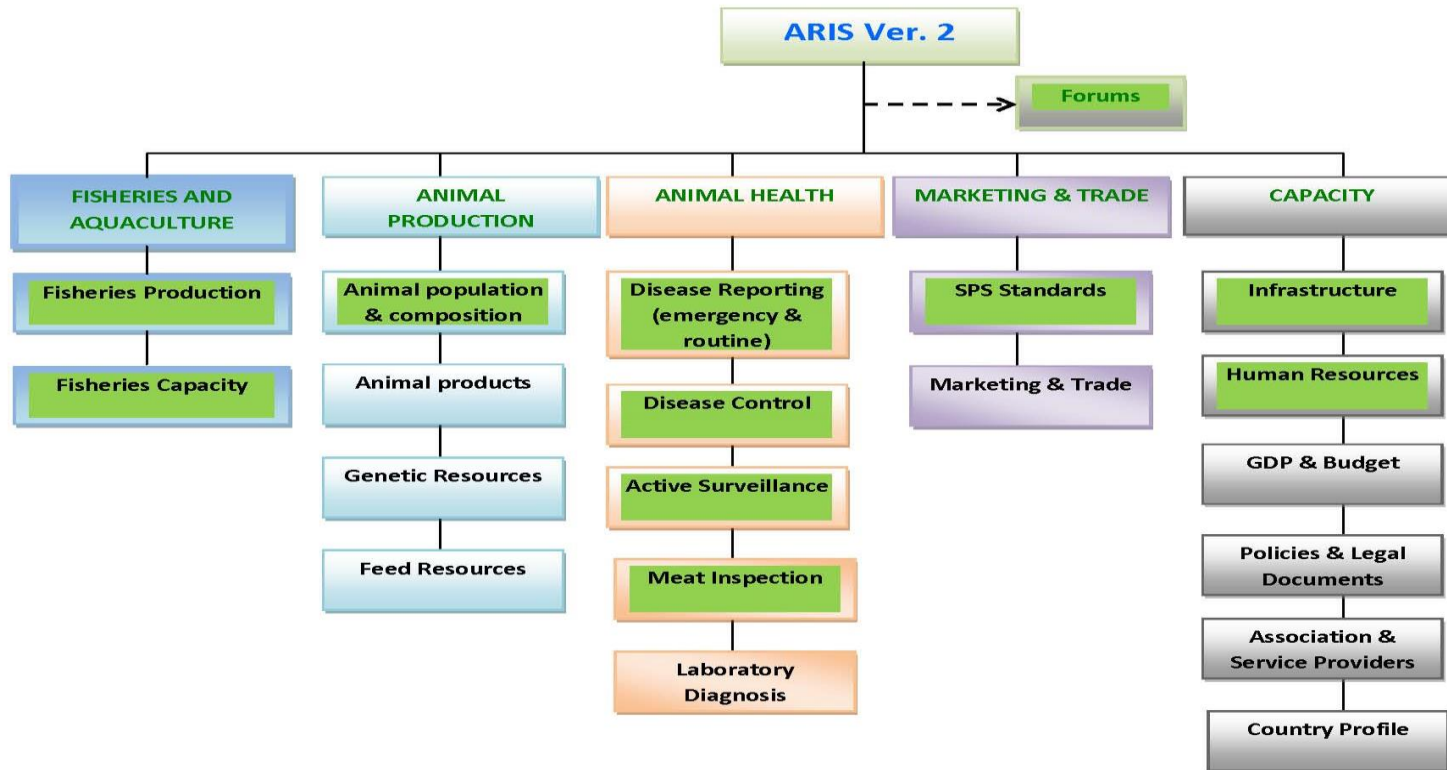


Major Features and Technical specifications

- **ARIS 2 is built as a SYSTEM:** Input, processing and Output
- **Integrated – covers all areas of Animal Resources**
- **Multilevel application; Multi-User; Multi-lingual**
- **Good and scalable security**
- **Web-based reporting (but with off-line mode);**
- **Provides real-time information gathering and sharing capability;**
- **Customisable to country specification and needs;**
- **Data ownership (with validation and sharing at will);**
- **Allows step wise roll out based on capacity etc**

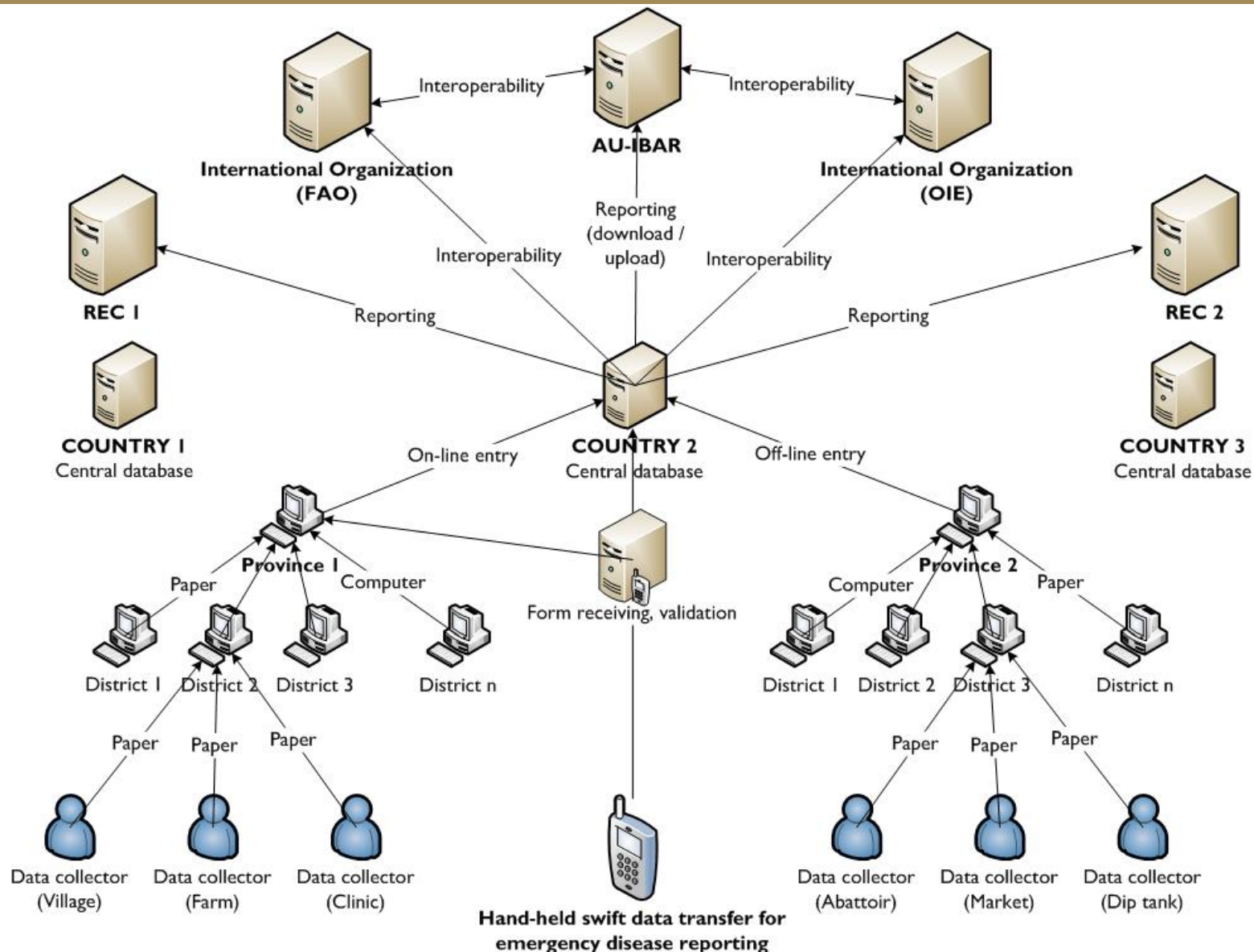


ARIS Transactional Modules



Multilevel application

can be used at the sub-national, national, regional and continental levels





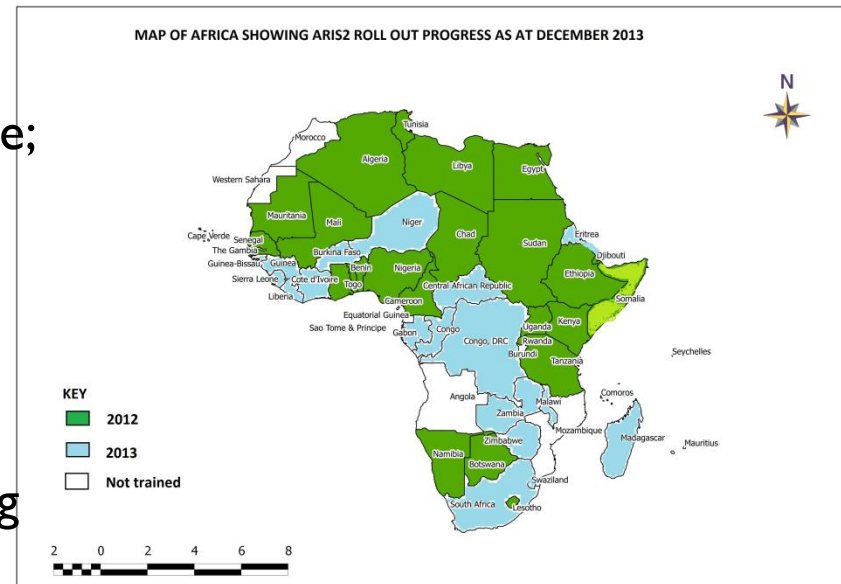
Features (contd)

- Allows data analysis and mapping of information;
- Allows step wise roll out – at different administrative levels and Module operational level
- Interoperability:-
 - Uses common reference data with other information systems – such as administrative divisions; maps, disease names etc
 - Capability for data import and export in excel, csv formats etc;
 - Development of data exchange with WAHIS on-going;
- Standards and common protocols - will use best practices set by international organizations, e.g.
 - OIE standards for reference data etc.
 - ISO codes for abbreviations of country names and currencies.
 - GIS conventions for the levels of administrative setup and geo-referencing



ARIS Roll out and Training

- **Officially launched**
- **Training**
 - National level – **45** MSs and 8 RECS
 - National trainings – **30** countries done;
 - # users trained – **814**
 - Participants from Animal Health, Laboratories, Animal Production and Fisheries
 - All 30 countries have tested reporting to AU-IBAR using ARIS
 - # MSs that have formally sent reports to AU-IBAR using ARIS – 20
- **AU-DREA – PATTEC, IAPSC & PACA**





IBAR Action Plan

- **Develop and continue to improve the system based on needs;**
- **Avail the system to all AU-MSs and RECs;**
- **Host the system server with adequate back up and security;**
- **Training of ARIS Regional and National system administrators;**
- **Support Training of ARIS users at National level;**
- **Training on Data collection and analysis;**
- **Technical backstopping;**
- **Computers**
- **Improvement in feedback – AHYB/ARYB; Quarterly AH Digest; presentations etc;**

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Disease outbreak data – 2008 -2012

Year	2008	2009	2010	2011	2012
# Outbreaks		12,507	17,708	30,825	17086
# cases	2,411,090	1,013,938	5,286,686	2,018,810	4,100,691
Total reported loses	1,272,718	383,434	668,538	1,124,558	3,450,480
Est value of loses (\$)	327,088,526	98,542,538	171,814,266	289,011,406	886,773,360

SOURCE: Monthly reports submitted by Member states to AU-IBAR



Bee health reporting and data at AU-IBAR



OIE Listed – Bee diseases, Infections and Infestations

- Infection of honey bees with **Melissococcus plutonius**(European foulbrood)
- Infection of honey bees with *Paenibacillus larvae* (**American foulbrood**)
- Infestation of honey bees with *Acarapis woodi*
- Infestation of honey bees with *Tropilaelaps* spp.
- Infestation of honey bees with *Varroa* spp. (**Varroosis**)
- Infestation with *Aethina tumida* (**Small hive beetle**).
- **Small hive beetle infestation (*Aethina tumida*)**



Bee health data

Outbreaks reported to AU-IBAR 2010 - 2014

Disease	Reported outbreaks		Total
	Algeria	Swaziland	
American Foulbrood	4	0	4
European Foulbrood	3	0	3
Nosemosis	12	0	12
Varroosis	183	2	185
Total	202	2	204

Reported to OIE:

- American Foulbrood – South Africa, Rwanda
- Varroosis - Rwanda



Challenges

- **ARIS system - technical and human resource challenges**
- **Types of data**
- **National Reporting systems**
- **Bee Data issues:**
 - Production establishments and sites
 - Lack of good knowledge of Bee diseases
 - Reporting system/network
 - Laboratory support
 - Institutional framework and networking –
Forestry/Environment Vs Veterinary authorities



Possible Modules in ARIS2

- **Production data**
 - Major Production sites and Commercial outfits
 - Output data
- **Marketing data**
- **Disease outbreak data – Specific on Bee health or integrated in general animal health**
 - Disease outbreaks
 - Surveillance activities
 - Laboratory data
- **National focal points, specialized national user group and Experts database**
- **Forum**



Conclusion

- **Need for comprehensive Information management system in many countries in Africa;**
- **Strengthening of collaboration and data sharing between different sectors, organizations and actors on Bee health control;**
- **The decentralised information management approach that ARIS2 follows will enable relevant user groups and/or Institutions in MS, RECs & AU to have flow of information in standardised and swift manner;**
- **ARIS2 can play a major role in data management on honey Bee production, marketing and Bee health;**
 - Support MSs and RECs on Bee data management



Thank You



AU-IBAR: Providing leadership in the development of animal resources for Africa

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