

# FAO GLOBAL INITIATIVES ON REGIONAL VETERINARY LABORATORY NETWORKS



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**and several FAO colleagues...**

# Support to national laboratories

- Laboratory training programs
- Laboratory expert missions: assessments, on-site assistance
- Invitations to international conferences
- Standardized protocols
- Procurement of laboratory items
- Contracts with RL for AI/ND (2.5 M \$ to AI ref. labs)
- Intern. shipment to OIE/FAO RL ([empres-shipping-service@fao.org](mailto:empres-shipping-service@fao.org))
- Advocacy for international collaborations and virus/information sharing

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# Main challenges for vet labs

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Overall technical level has increased but still...

- Lack of political recognition
- Number/quality of samples
- Reliability of lab results?
- Continuity in reagents availability?
- Staff: competence, future generations?
- National priorities versus global priorities?

# Justification of regional networks

- **Within regions: more harmonization - political weight - coordination of activities – information sharing**
- Improved transparency of disease reporting
- Faster response to disease outbreaks
- Sharing of expertise and experiences
- Better and easier coordination of training opportunities
- Breaking the isolation of national teams in developing countries
- Standardization and harmonization of regional approaches to diagnosis
- Sharing of standardized diagnostic reagents
- Regional proficiency tests

# Main activities of these networks

- Capacity building: training, participation to international conferences, technical assistance
- Inter-laboratories exchanges (with/within network)
- Information sharing (websites, mailing lists...)
- Proficiency tests
- Twinning opportunities
- Laboratory techniques harmonization
- Annual meetings
- Advocacy

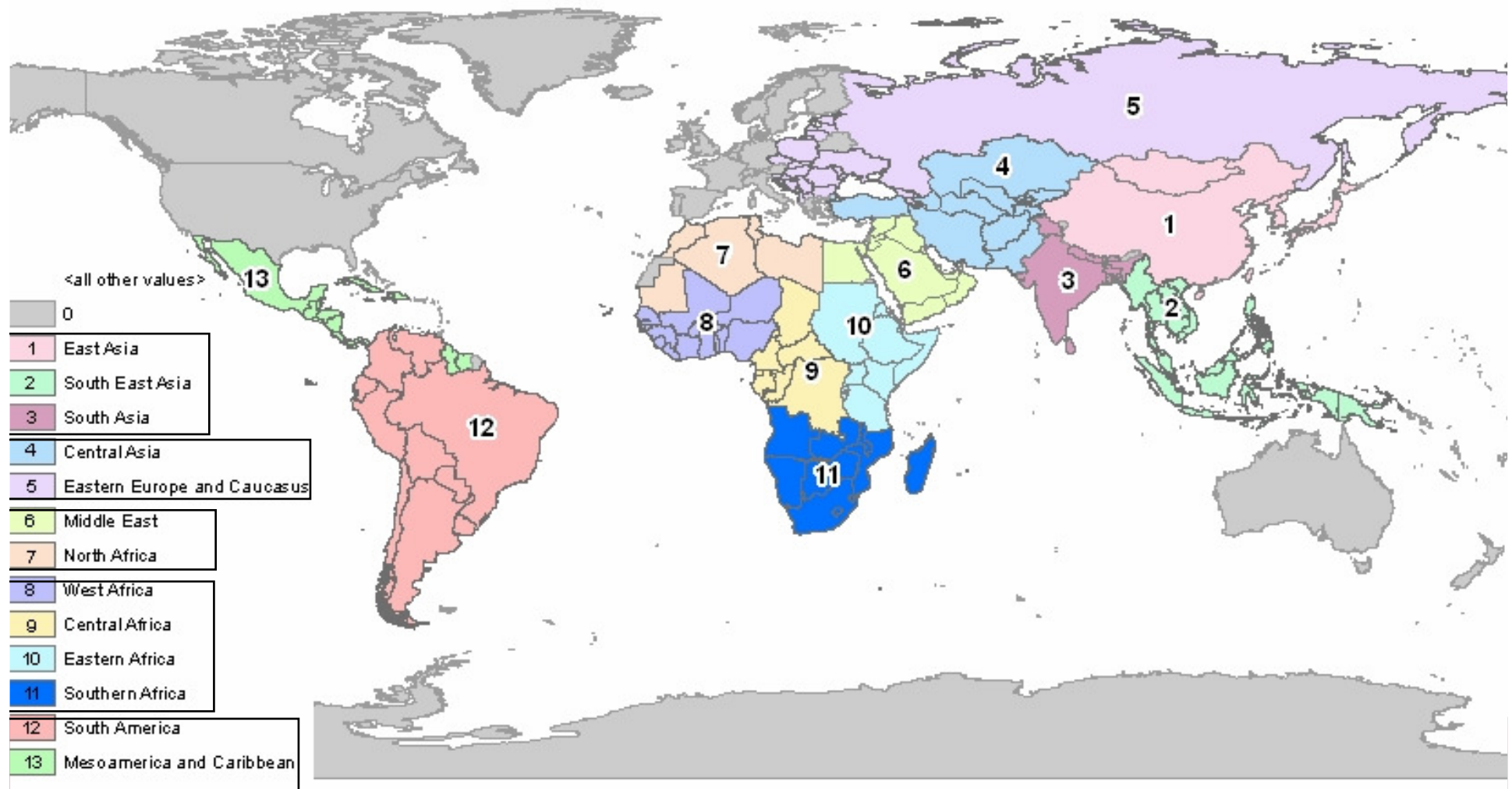
# FAO's approach to lab networks

- Global focal point in HQ/regional focal points (lab + epi)
- Coordination from HQ with ECTAD units/FAO regional offices (annual meetings in HQ)
- Both institutional and human networks
- Network of all national veterinary labs of a region
- Selection of regional laboratories
- Coordination/support by FAO: preparation and implementation of workplans, annual meetings, training programmes, procurement, laboratory assessments, etc.
- Priority: sustainability of these networks
- Anchorage within the REC
- Geographical coverage: same as RECs

# FAO's proposed approach (cont'd)

- Specific support to regional laboratories (ie. workplans, twinning, incl. OIE)
- Collaborations with international laboratories (FAO/OIE reference laboratories)
- Possibility of sub-networks/groups:
  - for specific objectives (ie groups with/without PCR)
  - for training activities (ie quality assurance)
  - for specific diseases (RVF)
- Close links with the Epidemiology Network = necessary (samples collection/testing/lab data compilation)
- Connections with other lab networks (ie IAEA networks, public health, regional, OFFLU)

## FAO's GLOBAL VISION FOR REGIONAL NETWORKS





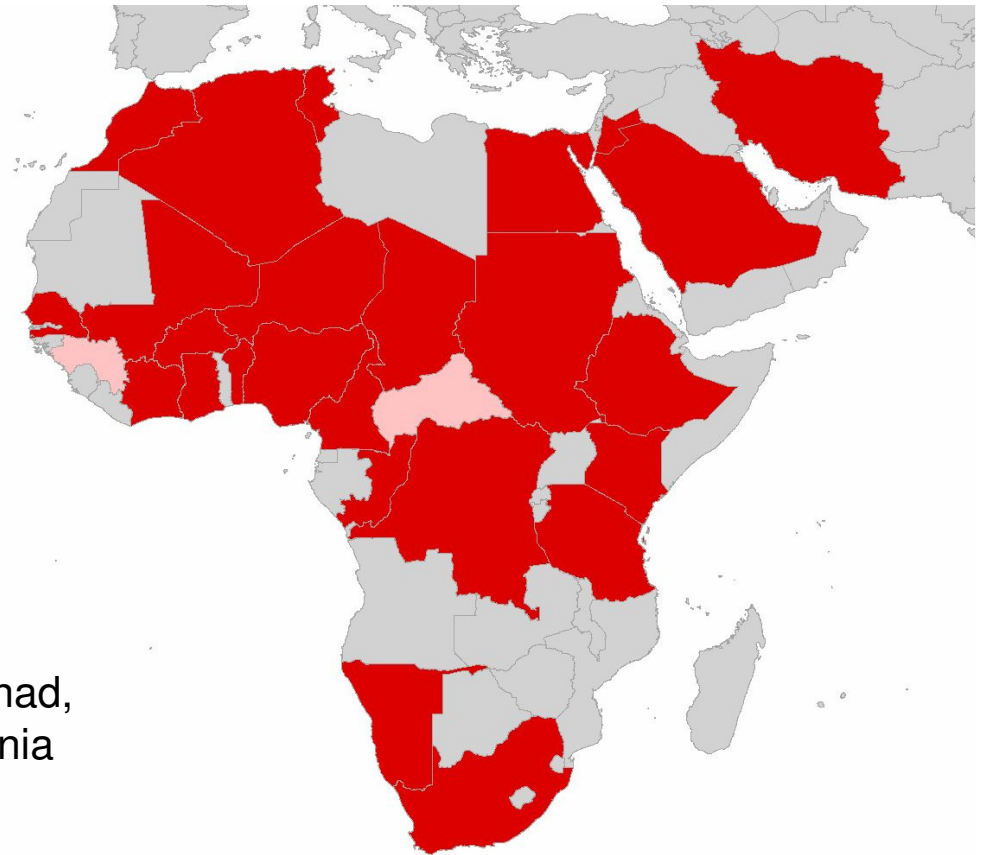
# Proficiency tests

- Aimed at assessing the capacity of laboratories to diagnose HPAI virus by PCR and/or serology
- 2008:
  - 26 countries in Africa and Middle East
  - Letters of invitation (IZSve)
  - Panels of 10 freeze-dried antigens and sera (incl. NDV)
  - Reagents supply
  - Shipped in October 2008 (through FAO diplomatic pouch)
- 2009:
  - 30 countries (incl. Central Asia)

# AI/ND Proficiency tests in 2008

## 26 countries

- PCR+serology
- serology



- Morocco, Tunisia, Algeria, Saudi Arabia, Iran, Jordan, Egypt, Kenya, Ethiopia, South Africa, Sudan, Burkina Faso, Cameroon, Cote d'Ivoire, Ghana, Mali, Niger, Nigeria, Senegal, Benin, Chad, Democratic Republic of Congo, Namibia, Tanzania
- Central Africa Republic, Guinea Conakry (only serology panels)

# Four regional networks in Africa

- **Coverage**

- North, West/Centre, East, SADEC

- **Regional Animal Health Centers**

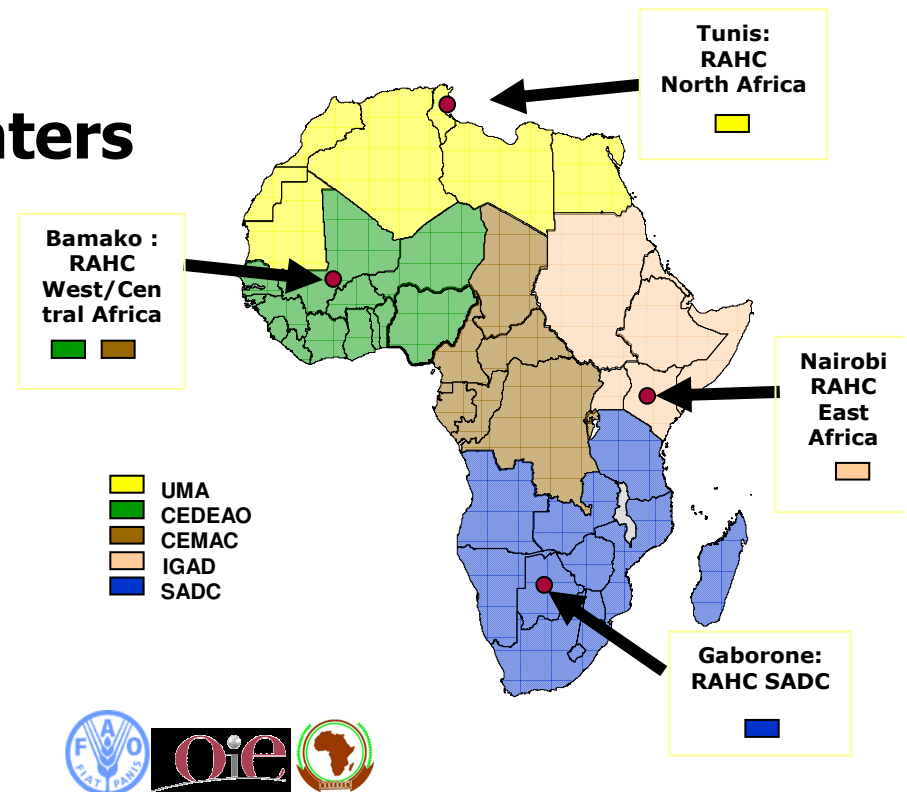
- AU-IBAR/FAO/OIE

- **Coordination**

- by RAHC-FAO

- **Regional laboratories**

- half already selected

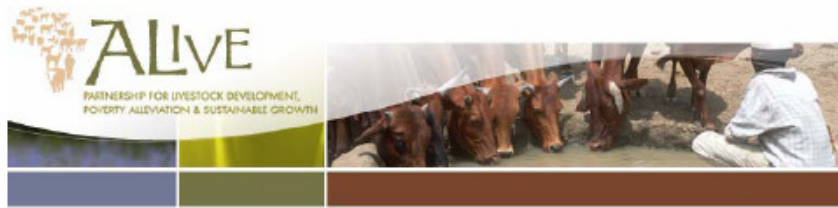


# Activities implemented in the African regional networks

- West/Centre: cf Dr Seck
- North Africa: 2 regional meetings, training program, lab expert, procurements, Proficiency tests (3 countries)
- East Africa: meetings, assessments of 3 labs, procurements, regional trainings, Proficiency tests (3 countries)

# Activities implemented in SADC

- Laboratory Diagnostic Sub-Committee
- FAO:
  - Support to regional meetings
  - Laboratory assessments + questionnaires to all labs
  - Assistance for selection of a second regional lab
    - Short-list of 4 national labs (FAO consultant)
    - Visit of the 4 labs by FLUTRAIN experts
    - Meeting and teleconf chaired by FAO
  - Support to the second regional lab
    - Integrated workplan: FAO support/OIE twinning
  - LIMS
  - Procurement; regional hub
  - Proficiency tests (2 countries)



**ALive Feasibility Study on  
Laboratory Networks  
in Africa**

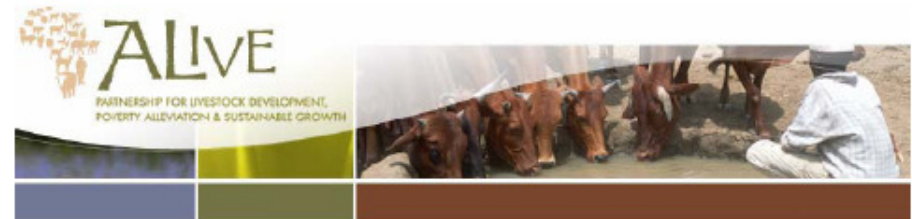
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**ALive Feasibility Study on  
Epidemiology Networks in Africa**

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# Networks in Asia

- FAO Technical Cooperation Programs (TCPs)
  - 3 networks initiated for HPAI surveillance and diagnosis in Southeast, East and South Asia
  - Assistance to put in place harmonized and effective surveillance and diagnosis program by exchange/analysis of data and experiences, and capacity building activities
- Consultative Meeting of Regional Laboratory Network for HPAI Diagnosis in Southeast Asia (23-24 June 2009)
  - Organised by FAO
  - Invitees: OIE, AAHL, ASEAN Reference Laboratory for HPAI, USDA, Other Collaborating Laboratories in the region, OFFLU rep.
  - Seek an agreement on roles and responsibilities related to regional laboratory networks for Southeast Asia among the key international partners + agree plan of activities for 3 years
- Central Asia:
  - group training, annual meeting, PT, etc

# Conclusions

- Other networking initiatives have succeeded in the past (ex. Rinderpest)
- Role of FAO: launch/support/coordinate regional networks
- Role of regions: ensure ownership and sustainability of these networks
- Collaborations with epi/human health sector/other networks



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