



Food and Agriculture Organization of the United Nations



# Capacity building in support of animal identification for recording and traceability: FAO's multipurpose and global approach

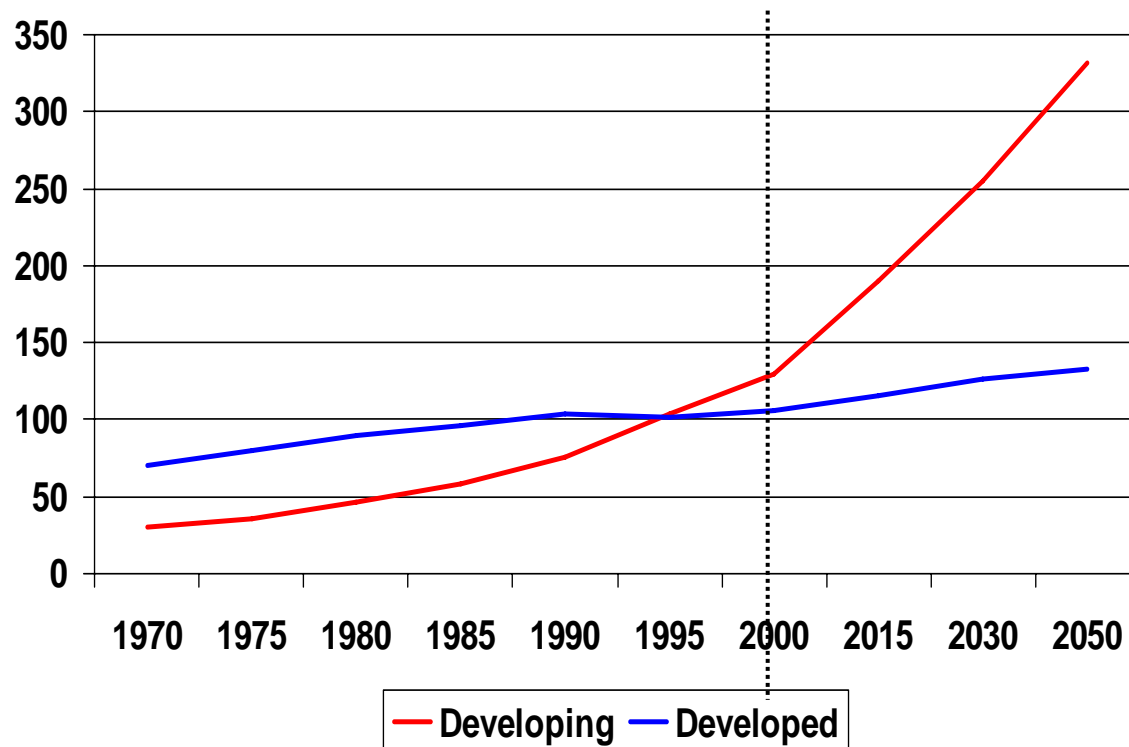
I. Hoffmann, D. Battaglia, B. Besbes and H. Wagner

OIE International Conference on Animal Identification and Traceability  
Buenos Aires, 23-25 March 2009



# Soaring output and structural changes

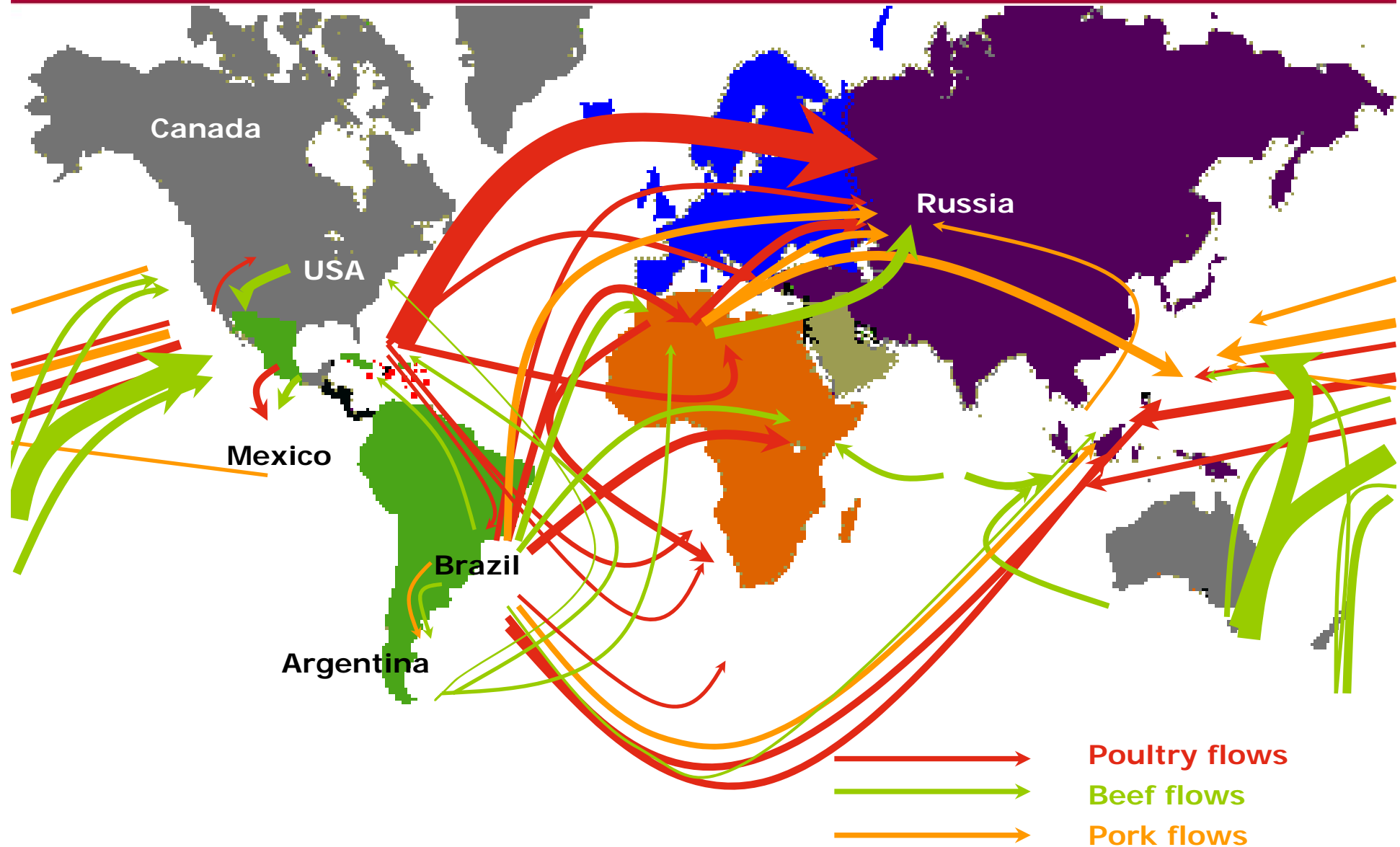
Meat: Million metric tons



- Growing intensities
- Increasing scales
- Geographic shifts / geographic concentration
- Vertical integration/longer food chains



# Trade in animal products





## Problems related to trade and rule enforcement

- Conflict, war, strife
- Natural disasters
- Illegal trade
- Weak institutions



## Push for traceability

- awareness of consumers about food safety, quality, animal welfare and environmental impact of livestock production
- reduction of government investment and privatization of government services



# AI & traceability as tools to

## **Protect human health** (food safety) (WTO SPS Agreement)

- identify, trace and control animal movements
- identify, trace and recall unsafe foods (and feeds) at any stage of the food production and distribution chain
- tool of risk management

## **Ensure fair practices** in food trade (WTO TBT Agreement)

- protect from deceptive practices and fraud in the market place and unsubstantiated product claims (e.g. geographic indication, food quality)



# AI - Important tool for many purposes

Traceability of products

Traceability of animals

Theft control

Management on farm

Health certificates

Agricultural policy

Animal Welfare



Herdbook

Application of  
certain medicaments

Disease control

**distribution of costs among all stakeholders**



# AI & T Players – National level

- Competent authorities
  - Traceability, incl. feed safety
  - Public health
  - Animal health and welfare
  - Animal movement
- Breeders organisations
  - Production recording
  - Herd book and IPR
  - Artificial insemination and breeding programme management
- Livestock and food industry
  - Market access
  - Traceability
  - Product branding






# AI & T Players – International level

- Standard and guideline setting
  - OIE
  - Codex Alimentarius
  - International Committee for Animal Recording (ICAR), ISO;
  - private/retail/processing
- Support to standards implementation
  - FAO and other technical agencies
  - World Bank and other funding agencies
  - Livestock and food industry



# Standard "chain"

 International standard setting body	Set International standard
National government	Translate into national legislation
Competent authorities	Implement and enforce laws
Audit/certification body	Certify compliance with standards



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**Capacity building**



# Food and Agriculture Organization of the UN

- National Counterpart: **Ministry of Agriculture**, Livestock, Environment, Health, Planning etc
- Partners
  - international conventions and bodies (OIE, CODEX, WHO, CBD, UNDP, WB etc)
  - REO (EC, SADC, UEMOA, MERCOSUR etc)
  - CGIAR/ARIs/NARS
  - NGOs/CSO, professional organizations (WVF, WAAP etc)
  - private sector (IDF, IMS, IPC, IFIF, IFAP, EFFAB etc)



# FAO's Global Goals

- reduce the number of people suffering from hunger;
- eliminate poverty, increase food production, enhance rural development and sustainable livelihoods;
- sustainably manage and utilize natural resources, for the benefit of present and future generations.



# Core Functions of FAO

- monitor and assess trends in food security and agriculture, fisheries and forestry;
- generate, disseminate and apply information and knowledge, including statistics;
- negotiate international instruments; set norms, standards and voluntary guidelines,
- support the development of national legal instruments and promote their implementation;
- articulate policy and strategy options and advice;
- provide technical support and build capacity;
- advocate and communicate to mobilize political will;
- work in an integrated interdisciplinary and innovative approaches through strong partnerships and alliances.



FAO



4000 staff - 192 Members



FAO

5 Regional offices



4000 staff - 192 Members





FAO

8 Sub-regional offices



4000 staff - 192 Members



# FAO

## 4 FAO/OIE animal health offices



4000 staff - 192 Members



FAO

5 Liaison offices



4000 staff - 192 Members



FAO

## 78 Country Representations



4000 staff - 192 Members



# Technical Cooperation Programme

- since 1976, it provides FAO members with specialized assistance to address priority issues



more info: <http://www.fao.org/tc/tcp>

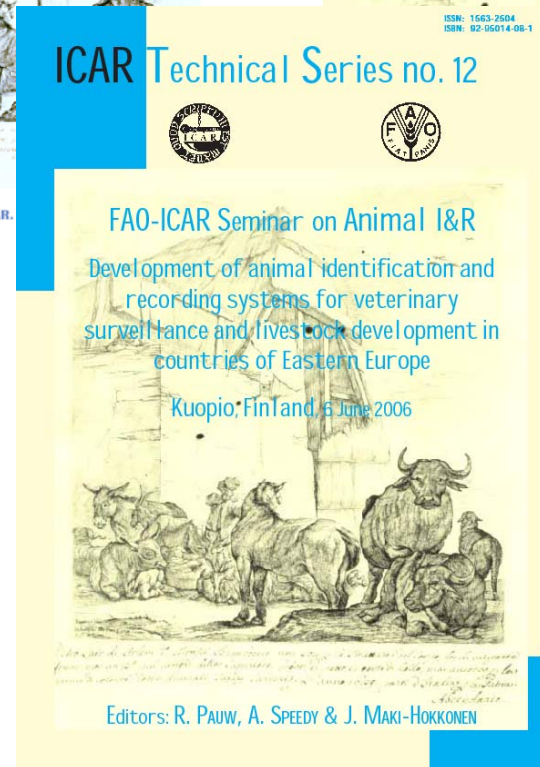
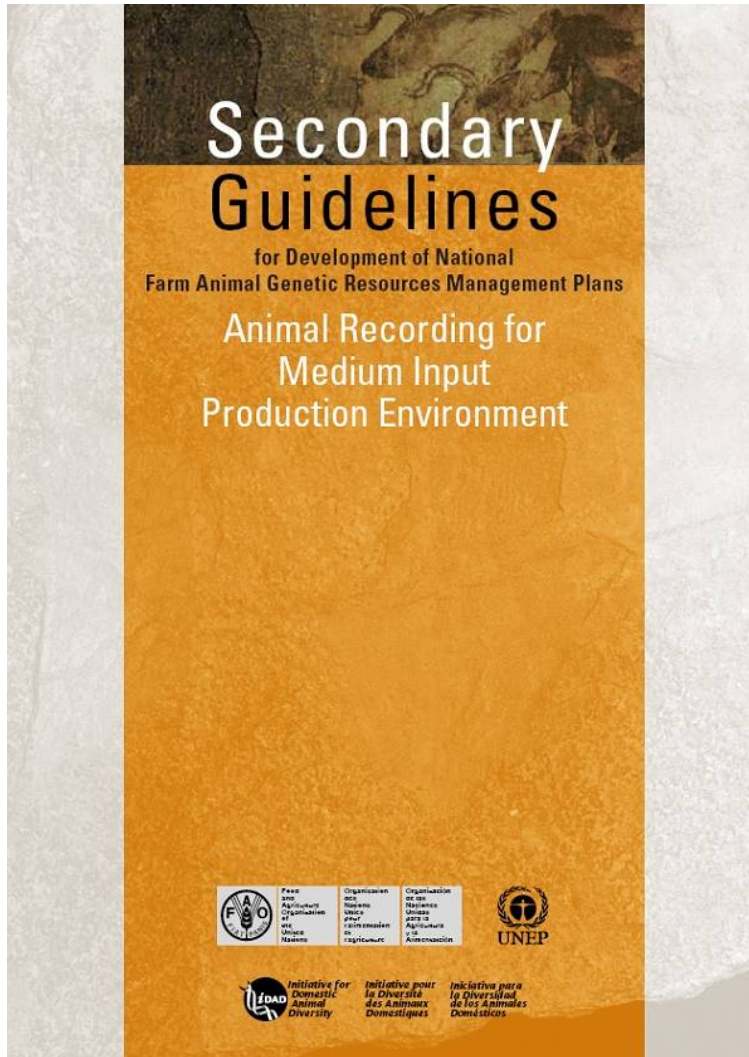


## FAO's activities in AI

- technical cooperation projects to draft legislation and design national AI (& R) systems; e.g. Chile, Uganda, Malawi, Lesotho, Ukraine, Nepal, etc.
- FAO-ICAR workshops on AI & T & R (e.g. Botswana 2009, Hungary 2008; Finland 2006, Tunisia 2004, etc.)
- lead ICAR Task Force for Developing Countries



# Guidelines for AI & R & T





# FAO-APHCA

Workshops/Meetings : Animal Health and Welfare - Regional Representation for Asia and the Pacif - Microsoft Internet Explorer

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## Workshops/Meetings : Animal Health and Welfare

### OIE/FAO-APHCA Joint Workshop on Animal Identification and Traceability (Colombo, Sri Lanka, 2-4 July 2007)

The Workshop was attended by 31 participants from 18 countries (Australia, Bangladesh, Bhutan, PR China, Germany, India, Indonesia, Iran, Laos, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand and Vietnam), 3 international organisations including FAO-APHCA, OIE and ICAR.

Mr S.J. Pathirana, Secretary of Livestock Development, Sri Lanka, Dr Pote Chusri, FAO Representative for Sri Lanka and Maldives, Dr B. Khambounheung, APHCA Chairperson and Dr Y. Oketani, OIE Deputy Regional Representative for Asia and the Pacific, delivered the welcome addresses and H.E. Mr Hon CB Patanayake, Minister of Livestock Development, Sri Lanka declared the opening of the Workshop.

Dr Hans Wagner, APHCA Secretariat, explained the purpose of the Workshop. He proposed the participating countries to join the animal identification model project under the FAO Technical Cooperation Project.

Dr Luis Barcos, Chairman of OIE Animal Identification and Traceability Ad Hoc Group, made a presentation on OIE Standards and Guidelines. He explained Ad Hoc Group's activities and introduced the related Chapter of OIE Code recently adopted at the OIE General Session and the OIE *Scientific and Technical Review* published in 2001.

Dr Oie Klejs Hansen, Chairman of the ICAR, discussed standardized animal recording systems using special plastic ear tags with a bar code developed by ICAR.

Dr Roger Paskin, Principal Veterinary Officer of Department of Livestock Industry of Victoria, Australia, introduced Australian experience in animal identification using IC chip for cattle.

In the following Sessions, India, PR China, Malaysia and Thailand presented their country reports. The delegate of Iran introduced their Global Positioning System (GPS) to trace the movement of animal herd from the satellite.





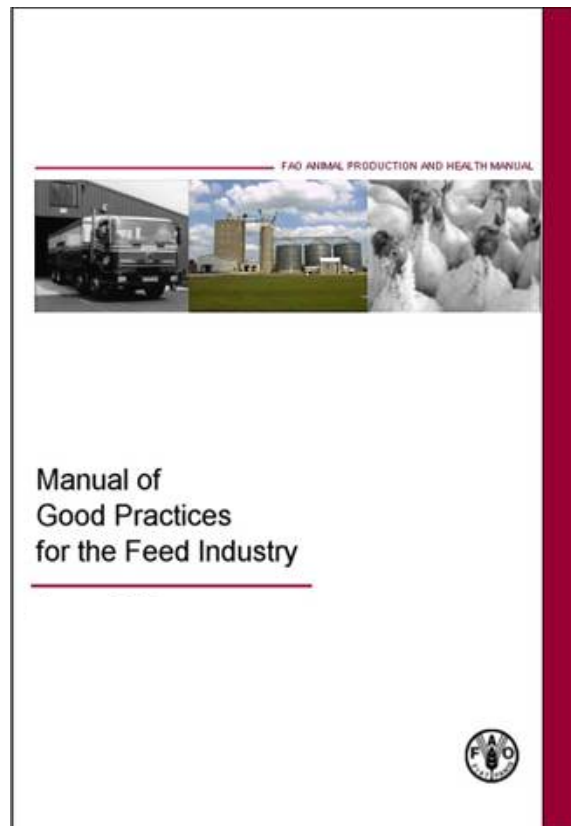
# AI & T





# AI & T: implementing the Codex Codes

- Code of Hygienic Practice for Meat
- Code of Hygienic Practice for Milk and Milk Products
- Code of Practice on Good Animal Feeding





# AI & T

- AI & T as a relevant component of veterinary public health and food safety and quality technical cooperation projects (e.g. prevention and control of BSE and other zoonoses)
- Programme on Food Quality Linked to Geographical Origin and Traditions
  - regional seminars (Morocco, Chile, Serbia, Thailand) and forthcoming in Costa Rica
  - Technical cooperation project (Morocco, Tunisia, Latin America, Bhutan)
  - 10 case studies in Latin America + 6 in Asia
  - Forthcoming guide on how to establish specific quality scheme linked to geographical origin
  - Regional project in the Mediterranean (with CIHEAM)



## Joint FAO/IAEA programme: nuclear techniques in food and agriculture

- Technical Co-operation
- Research Networks
- Coordinated Research Projects
- Agriculture and Biotechnology Laboratory  
Training Courses



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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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the gateway to environmental law

A multilingual team summarizes and in many cases translates laws and regulations on topics falling within FAO's mandate - agriculture, cultivated plants, environment, fisheries, food, forestry, land and soil, livestock, water and wild species and ecosystems. Legal information is received by FAO from Member Nations pursuant to Article XI of the FAO Constitution.

Have direct access to abstracts and full texts. Enjoy your search!

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Latest entries

300 entries for AI and 200 for traceability

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The AGORA program, set up by the Food and Agriculture Organization of the UN (FAO) together with major publishers, enables developing countries to gain access to an outstanding digital library collection in the fields of food, agriculture, environmental science and related social sciences. AGORA provides a collection of 1278 journals to institutions in 107 countries. AGORA is designed to enhance the scholarship of the many thousands of students, faculty and researchers in agriculture and life sciences in the developing world.

### NEWS

**Notice to Band 2 subscribers**  
31/Jan/2007  
Some titles may not yet be accessible to Band 2 users  
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**OARE Launch Announced**  
30/Oct/2006  
The William and Flora Hewlett Foundation and the John D. and Catherine T. MacArthur Foundation help UNEP, Yale and many leading publishers, societies and associations launch OARE in New York.  
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**The power of information**  
27/Sep/2006  
FAO's AGORA initiative widens access to agricultural research to more countries  
[\[Read more...\]](#)

**Top French Scientific Publishers Join AGORA**  
26/Jan/2006  
Francophone scientists in 69 of the poorest countries of the world will now be able to access scientific journals in their own language [\[Read more...\]](#)

**The AGORA initiative celebrates its first anniversary**  
03/Feb/2005  
Its first year of existence has seen significant increase in user participation as more publishers have agreed to provide online

### FEEDBACK

**Sudan, March 2008** Thank you for your letter of 10th of March enclosing the user name and the password for AGORA.  
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**Sudan, March 2008** Really am impressed by your email which shows me the high standard of the team am dealing with.  
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### EVENTS

**ITOCA training 2008 calendar** ITOCA has trained over 5,000 information professionals, scientists and students in electronic information programs in over 30 Sub-Sahara countries in the last nine years. [\[Read more...\]](#)

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Visit our sister site HINARI to access major scientific journals in the field of public health.

## OARE

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Please visit our sister programme Online Access to Research in the Environment.



AGORA News Letter

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# International Portal on Food Safety, Animal & Plant Health

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System last updated 18 February 2009  
IPFSAPH now contains 39985 records



[www.ipfsaph.org/En/default.jsp](http://www.ipfsaph.org/En/default.jsp)

### Welcome to the new look International Portal on Food Safety, Animal and Plant Health (IPFSAPH)!

If you are a regular user, you will notice that the portal has recently undergone a bit of a makeover. The underlying quality of information is the same, and portal remains a reliable means of accessing official information on food safety, animal and plant health relevant to the SPS Agreement. We have improved the advanced search facility and added in some new functionality such as RSS feeds, and new data sets from IAEA, JECFA, OECD and WTO. A new User Guide can be downloaded from the Help menu, where you will also find information on how to contribute national material, as well as a FAQs section. We are constantly striving to improve the portal so please [email](#) us your comments, feedback and queries.







# Standard and Trade Development Facility (STDF)

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## Standards and Trade Development Facility

Background

Coordination activities

Funding opportunities

Ongoing & completed activities

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### Standards and Trade Development Facility

**The website is under reconstruction and will be updated in January 2008. All enquiries should be addressed to [STDFsecretariat@fao.org](mailto:STDFsecretariat@fao.org) in the interim.**

The Standards and Trade Development Facility (STDF) is a global programme of capacity building and technical co-operation established by the Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), the World Bank, the World Health Organization (WHO) and the World Trade Organization (WTO).

The strategic aims of the STDF are:

- to assist developing countries enhance their expertise and capacity to analyze and to implement international sanitary and phytosanitary (SPS) standards, improving their human, animal and plant health situation, and thus ability to gain and maintain market access; and
- to act as a vehicle for co-ordination among technical co-operation providers, the mobilization of funds, the exchange of experience and the dissemination of good practice in relation to the provision and receipt of SPS-related technical co-operation.

In addition to facilitating international trade, SPS capacity building can result in improved human and agricultural health conditions for local markets and so favour economic and social development.

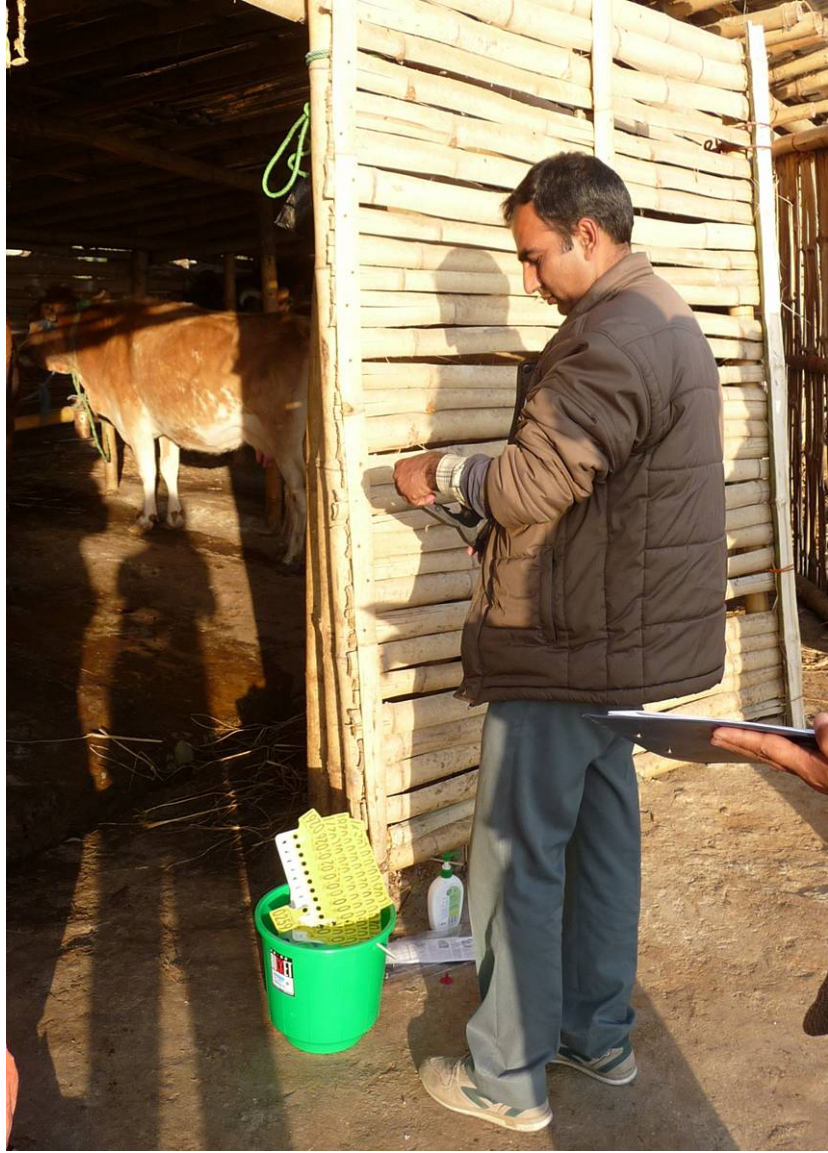
In achieving its aims, the STDF acts both as a co-ordinating and a financing mechanism.

#### What's New

- [STDF Operating Plan 2007](#)
- [STDF Medium Term Strategy \(2007-2011\)](#)
- [STDF Operational Rules](#)
- [STDF Evaluation Report](#)
- [Summary Report of the STDF Working Group Meeting \(March 2007\)](#)
- [Canada gives CAD 400,000 for food, animal and plant health standards](#)
- [UK gives a further SFr 1.2m for food, animal and plant health standards](#)
- [US renews contribution for food, animal and plant health standards](#)

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<http://www.standardsfacility.org/>





## Results of AI survey (38 countries)

- No regional profile/specificity
- AI systems and their implementation vary widely from country to country
- Different AI systems addressing different needs coexist
- Mostly for dairy cattle, but exist also for beef cattle (4), sheep (7), horses (2), buffalos (4), pigs (3)
- Many programmes have failed



## Results of AI survey (38 countries)

- Motivations
  - Export (12), mandatory and/or voluntary; “forced to comply with EU regulations” (4), mandatory
  - Genetic improvement (11), pedigree and performance recording, voluntary
  - Maintain purity of breed (8) where breed societies exist, pedigree recording, voluntary
  - Disease control (4), mandatory



# Reasons for failure

- Producers' perceived intrusion & non-confidentiality of information
- Initial cost and sustainability of the system, cost-benefit sharing
- Lack of:
  - infrastructure and support services;
  - capacity and education;
  - coordination among different players
  - legislative frameworks and enforcement



# Requirements for success

- Policy and legislative framework
- Efficiently and professionally run systems matching available infrastructure, cultural and traditional aspects
  - Government support – technical/funding
  - Development of low cost and simple systems without compromising the accuracy/integrity - KISS principle
  - Phased implementation of the programme
  - Awareness and involvement of all stakeholders throughout the process
- Fair cost and benefit sharing
  - Relevant feedback of information to producers, higher prices



# Requirements for success

- At national level
  - Studies to demonstrate the economic benefits of AI&R&T systems
  - Integration of AI &R&T in a local service/extension package
  - Coordination and cooperation among responsible organizations and all stakeholders
- At international level
  - Networking and exchange of experiences among all players: standard setting agencies, competent authorities, private sector, international agencies



**thank you**





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**QUICK LINKS**

- WHAT'S NEW**
- ★ **Meat & Meat Products** Web pages now available in **french**
  - ★ **Documents** of the 5th ITWG



**FAO addressing animal welfare implications**

FAO recognises the importance of animal welfare practices that lead to benefits for both people and their animals and supports their implementation. But, how can FAO contribute to inform and support producers in developing countries to access the benefits of good animal welfare practices? FAO has decided to give more explicit and strategic attention to animal welfare in its capacity-building activities in countries with developing economies. To guide its activities, the FAO convened an Expert Meeting from 29 September to 3 October 2008. The Executive summary of the meeting report with the experts recommendations is now available [...]

**Information Note**

FAO is reminding countries and operators all along the food chain of the importance of good practices and ongoing vigilance to ensure the safety of foods of animal origin. The call arises as new studies of dioxin contamination are causing concern to governments, producers and consumers alike. [...]

**AGA in ACTION**

Public release of new EMPRES Global Animal Disease Information System (EMPRES-i) It is a web-based application that has been designed to support veterinary services by facilitating regional and global disease information. [...]

**Upcoming events**

- 26-27 January > FAO HQ (Rome)**  
Global Workshop for National Coordinators for the Management of Animal Genetic Resources
- 26-27 January > Atlanta (US)**  
FAO/IFIF - 2<sup>nd</sup> International Feed Regulators Meeting
- 26-30 January > Nairobi (Kenya)**  
Gf-TADs for Africa - FMD Regional Workshop
- 28-30 January > FAO HQ (Rome)**  
5<sup>th</sup> Regular Session of the Intergovernmental Technical Working Group on Animal Genetic Resources

**ANIMAL PRODUCTION AND HEALTH IN:**

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**Publications**



**FAO Animal Production and Health Papers Guidelines 1:**  
Collection of entomological baseline data for



**EMPRES Transboundary Animal Diseases Bulletin 32**  
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