FAO/WAICENT Strategy on Strengthening Agricultural Research Information Systems

Robert PORTEGIES ZWART
Information Systems Officer
FAO/WAICENT

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Outline

- FAO Strategic Framework 2000-2015

- Common Standards & Shared Methodologies
  - ◆ AGRIS/CARIS
  - ◆ VERCON
  - ◆ TECA

- Capacity Building
  - ◆ Technical Assistance
  - ◆ Resource Kit
  - ◆ Training

- Regional Approaches/Partnerships

FAO's Mandate

First Article of the FAO Constitution:

"The Organization shall collect, analyze, interpret and disseminate information relating to nutrition, food and agriculture."

➔ *More than 50 years of information capital*

WAICENT

World Agricultural Information Centre

- Bringing together multiple information related enterprises, databases and publishing tasks

- Reorienting these activities taking advantage of recent developments in information technology

Strategic Framework for FAO 2000-2015*

Corporate strategy E

"Improving decision-making through the provision of information and assessments and fostering of knowledge management for food and agriculture"

* as approved by FAO Conference
30th Session in November 1999

Corporate Strategy E

Quality of FAO's information is closely correlated to the capacity of member countries to provide reliable and complete data.

Hence:

- Need to support/improve capacity of member countries for data collection and analysis

- More active exchange of information with other networks now in place, which can add to FAO's own capacity.

Corporate Strategy E

- Developing norms, definitions, methodologies and tools for the improved collection and use of data and information

- Assessing clients' current and new information requirements and adapting information systems in consequence

- Building capacity at the national level to improve data collection and information and knowledge management

Standards & Methodologies

With particular relevance to agricultural research:

- **AGRIS** -- International Information System for the Agricultural Sciences and Technology

- **CARIS** -- Current Agricultural Research Information System

- **VERCON** -- Virtual Extension, Research and Communication Network

- **TECA** -- Technology for Agriculture

International Information System for the Agricultural Sciences and Technology (AGRIS)

- Created by FAO in 1974

- Aiming to facilitate information exchange and to bring together world literature dealing with all aspects of agriculture

- Cooperative system of national, regional and international participating centres from all over the world

AGRIS (Cont.)

- Technical Consultation 1998: re-focusing AGRIS

- Concentrating on the dissemination of a wider range of agricultural information to a broader audience

- Priority to national capacity building

- Strengthening of national agricultural information management programmes using Internet-based technologies (Web-AGRIS)

AGRIS (Cont.)

Role of AGRIS Resource Centres:

- Adoption and implementation of standards for cataloguing and indexing agricultural information

- Documentation and organisation of relevant scientific and technical literature produced in their geographic/subject area

- Creation of digital repositories for literature and other types of STI

- Uptake as required of internet-based tools for data processing and dissemination

AGRIS (Cont.)

FAO's primary role to assist countries in reaching the goal of self-sufficiency in information management

- Develop tools and methodologies to be used at national, regional and international levels, as part of global information exchange process

- Sensitize decision-makers about the importance of investing in information systems

- Organize/support training activities

Current Agricultural Research Information System (CARIS)

- Created by FAO in 1975

- Aiming to identify and to facilitate the exchange of information about current agricultural research projects being carried out by - or on behalf of - developing countries

- Cooperative network operating worldwide on a decentralized basis

CARIS (Cont.)

- National and regional CARIS Centres process and disseminate information concerning agricultural research undertaken within their areas of responsibility

- Using a standardized methodology for data gathering and initial data recording developed by FAO

Virtual Extension, Research and Communication Network VERCON

- Aiming to harness the potential of the Internet to improve linkages between agricultural research and extension

- Consists of two inter-dependent components:
  - ◆ **Human component**
  - ◆ **Technological component**

VERCON (Cont.)

- **Human component**

  a network of people committed to communicating, sharing information, and supporting agricultural producers

- **Technological component**

  an Internet-based tool used for information development, sharing, storage, retrieval, dissemination; and communication to address problems and identify solutions

Technology for Agriculture (TECA)

- Aiming to support the documentation and dissemination of proven technologies

- Web-based platform for a network of decentralised databases or repositories

- Using a standard field structure to describe technologies, for easy information exchange between repositories

TECA (Cont.)

Proven Technologies

Technology is defined as practices or techniques, tools or equipment, germplasm, know-how/skills, or combinations of the above components. Technologies always need to be described in their context, e.g. policies, infrastructure, environment, culture, etc.

A technology must be operating successfully in the field in order to be documented in the inventory.

TECA (Cont.)

- Prototype developed

- Will soon be launched officially

- Portable, so that decentralised repositories can be created

- Partners being sought to evolve a proactive strategy for information sourcing and content development

Capacity Building

WAICENT Outreach

- Technical Assistance

- Development of the Resource Kit

- Training Activities

- Partnerships and mechanisms for co-ordination

Field Activities

- Conducted with governments and local communities

- Providing technical advice and support

- Strengthening information management capacities

- Using appropriate ICTs

- In co-operation with regional partners

- Mostly financed by extra-budgetary funds

Field Activities Mechanisms

Strategic programmes:

- Information management component of the Special Programme on Food Security (SPFS)

- Food Security and Vulnerability Information and Mapping System (FIVIMS)

- Global Forum for Agricultural Research (GFAR)

Field Activities Mechanisms (Cont.)

Ad-hoc requests from Governments:

- Advisory missions and training support to national and regional organizations.

- Field projects funded by external donors, such as United Nations Development Programme (UNDP), World Bank, donor countries.

- Field projects funded by FAO's Technical Cooperation Programme (TCP).

Resource Kit

- Aiming to build new concepts, approaches & attitudes for effective information management among an international community through distance learning

- Developed and sustained by FAO in cooperation with contributing partner organizations

- Will provide learners with a pedagogically designed learning environment

- Distributed on CD-ROM to ensure accessibility

- Virtual Internet community to provide learner support and information exchange

Resource Kit Modules

A Management of Electronic Documents and Associated Images

B Management of Spatial and Statistical Data

C Community Building in Electronic Networking and Communication

D The Role of Information in Institutional Development

Need for Collaboration/ Partnerships

- Essential due to complexity of information management
- FAO's specialization on agricultural issues related to ICTs and digital divide complements others' work
  - ◆ UNDP, ITU, UN ICT Task Force, UNESCO
  - ◆ World Bank and CGIAR

Informal Consortia

- FAO actively seeking new collaboration and trying to establish informal consortia to improve capacity building

- Regional consortia for the development and delivery of training and tools in rural and agricultural information management

- AARINENA, AOAD, ICARDA, others, in WANA Region?

Regional Approaches

- Coordinating research information management activities in the Region

- Promoting existing international standards, tools and methodologies

- Collaboration in capacity building at the national level

- Exploring funding possibilities to strengthen information management activities in the Region
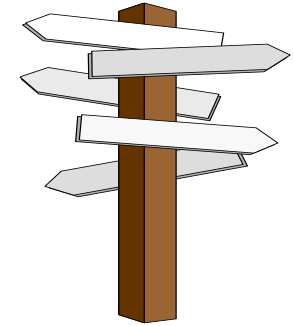
Activities in WANA

- **Egypt VERCON Pilot Phase**
  Project completed
- **Egypt VERCON Expansion**
  Project proposal submitted for funding
- **Sub-regional VERCON (Egypt, Jordan, Lebanon, Syria)**
  Project proposal being formulated
- **Egypt National Agric. Research Information System**
  Project proposal being formulated
- **Jordan National Agricultural Information System**
  Project proposal being formulated
- **ICARDA – Training courses in Information management**
  Letter of Agreement
- **AOAD – Capacity building**
  Letter of Agreement
- **CLAES – Prototype RAIS/AARINENA**
  Letter of Agreement

A Few References

> FAO Strategic Framework 2000 - 2015:

http://www.fao.org/strategicframework/

> WAICENT Outreach:

http://www.fao.org/waicent/portal/outreach/

> AGRIS/CARIS: http://www.fao.org/agris/

> VERCON: http://www.claes.sci.eg/vercon

> TECA: http://waicent.fao.org/test/teca