

**Information and Communication Management
for Rural and Agricultural Development
in Near East and North Africa Region
(AARINENA.RAIS/ICM4ARD):
Outputs and Lessons Learned**

Magdi Latif

FAO Knowledge and Capacity For Development Division
Knowledge Exchange, Research and Extension Office



AARINENA RAIS

NERAKIN Initiative: Immediate Objective (2007)

To strengthen the capacity of the Ministries of Agriculture and agricultural and rural research institutions for effective information management and knowledge exchange in support of rural and agricultural development in the region

Contributing and Supporting Partners: AARINENA, GFAR, FAO, CGIAR

“The regional initiative will add value in a coherent way to national system/networks, not substitute them.”

“Build infrastructure to network all ARC agricultural institutions through a regional portal as well as through national portals.”



NERAKIN Initiative: Development Objective

To enhance rural and agricultural development in Near East and North Africa through strengthening information and knowledge access and exchange, providing mechanisms to:

- strengthen, coordinate, and add value to national and regional agricultural initiatives
- improve performance of farmers and agrarian businesses.

NERAKIN Phase I Outputs: 2007

- 1- A pilot NERAKIN Regional System for content management and information exchange.
- 2- Identification of technical institutions committed to capacity building in IKM.
- 3- Selected national technical staff sensitized on how to use NERAKIN Regional System.
- 4- Pilot national knowledge and information management systems/networks (i.e. Egypt, Jordan, Oman, etc.).



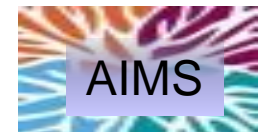
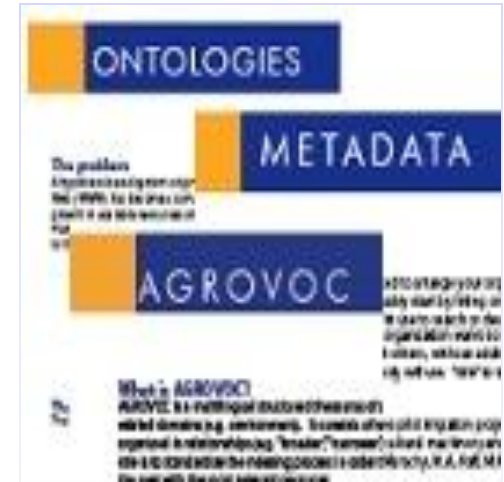
NERAKIN Phase II Outputs: 2008/2010

- Development of the **regional** collaborative network based on partnerships for enhanced knowledge-sharing and learning at **national** level
- Development of the **regional** thematic knowledge networks (Starting with Biotechnology Network).
- Official launch of NERAKIN regional portal
- Training of selected national technical staff to contribute to NERAKIN system
- Securing active commitment from stakeholders to develop national IKM systems/networks



Information Standards and Tools for Content Management

- AGMES – Agricultural Metadata Element Set
- AGRIS Application Profile
- AGROVOC Arabic/English
- Real Simple Syndicate - RSS
- Open Archives Initiative Compliance
- Online Web services
- Software – MySQL Open Source
- CIARD Manifesto and a common set of Principles



To develop and promote interoperability standards to facilitate the efficient dissemination of content.

interoperability is connecting people, data and diverse systems.

www.fao.org/aims

Agricultural Information Management Standards
 ■ Interoperability, Reusability, and Cooperation ■



Outputs

- **Regional Thematic Networks (from 2008 – present)**
 - Regional Agricultural Biotechnology Network Near East and North Africa - [RABNENA](#)
 - Near East Plant Protection Network – [NEPP-NET](#)
 - Regional Aquaculture Information system - [RAIS](#)
 - Preventive Desert Locust Management Network ([EMPRES](#)) and Commission for Controlling the Desert Locust in the Central Region (CRC) Regional Network];
 - Near East and North Africa Regional Network for Agricultural Policies – [NENARNAP](#)
 - Regional Virtual Extension Research Communication Network of Near East and North Africa – [VERCON Near East](#)

Regional Activities for Networks

- **December 2008:** Participated and provided contribution to **Regional Agricultural Biotechnology Network** Expert Consultation Meeting. Egypt, Cyprus, Iran, Lebanon, Libya, Jordan, Kuwait, Morocco, Oman, Saudi Arabia, Sudan, Tunisia , Yemen.
- **December 2010:** Organized regional Workshop on Knowledge Exchange Management System for Strengthening Rural Development (**Near East Regional VERCON Network**). Egypt, Jordon, Lebanon, Libya, Morocco, Oman, Sudan, Syria, Tunis, Yemen.
- **December 2010:** Organized regional Meeting on Establishment of **Near East Plant Protection Network**. Algeria, Egypt, Jordon, Iraq, Iran, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunis, UAE, Yemen

NERAKIN and Regional Thematic Networks



Regional involvement in national activities

Countries in the Region can now take advantage of a full range of conceptual models and networks that give stakeholders access to all major research on agricultural science and technology. These fall into three broad categories.

- projects designed to build capacity for developing effective information management systems based on stakeholders' needs to manage, disseminate and share relevant information and knowledge relating to agricultural development and food security policies
- initiatives developed to help organizations active in agricultural science to publish and disseminate the results of their work
- facilitating access to scientific literature in agriculture appearing in peer-reviewed learned journals, published commercially and sold at prices which are unaffordable in many countries



Mobilizing and Providing Access to Agricultural Information

- **AGRIS** – Providing agricultural research and development institutions with an avenue to publish and disseminate the outputs of their work
- **AGORA** - Providing access to the world's scientific literature in agriculture in peer-reviewed learned journals
- **CIARD** – Coherence in Information for Agricultural Research for Development



Capacity Building



www.imarkgroup.org

Partnership-based e-learning initiative

Oversight from the IMARK Steering Group





Management of Electronic Documents

Digitization and Digital Libraries



Building Electronic Communities and Networks

Investing in Information for Development: Issues and Options

Regional involvement in national activities

- **National and Institutional Information and Knowledge Networks**
 - National networks
 - Egypt – NARIMS
 - Jordan – NAIS
 - Oman – MAFNET/NAKEMS
 - Tools for institution and country levels - Agricultural Information System (AIS), WebAgris and Web-DIMS
 - Access to Global Online Research in Agriculture (AGORA)

- **Rural Information and Knowledge Networks**
 - Egypt – Virtual Extension Research Communication Network
 - Egypt – Rural and Agricultural Development Communication Network

Relationship between NERAKIN and National Networks

The screenshot shows the official website of the Sultanate of Oman's Ministry of Agriculture and Fisheries. The page features a navigation menu with categories like Home, Research, Extension Services, E-Services, News, Meetings and Events, Good Practices, Partners, and Contact Us. A sidebar on the left lists various services such as About MAFF, Main Activities, Initiations, Experts, Projects, Publications, Country Reports, and Agricultural Statistics Database. The main content area highlights 'Agriculture Month's Competition winners honored' and 'New Activities'.

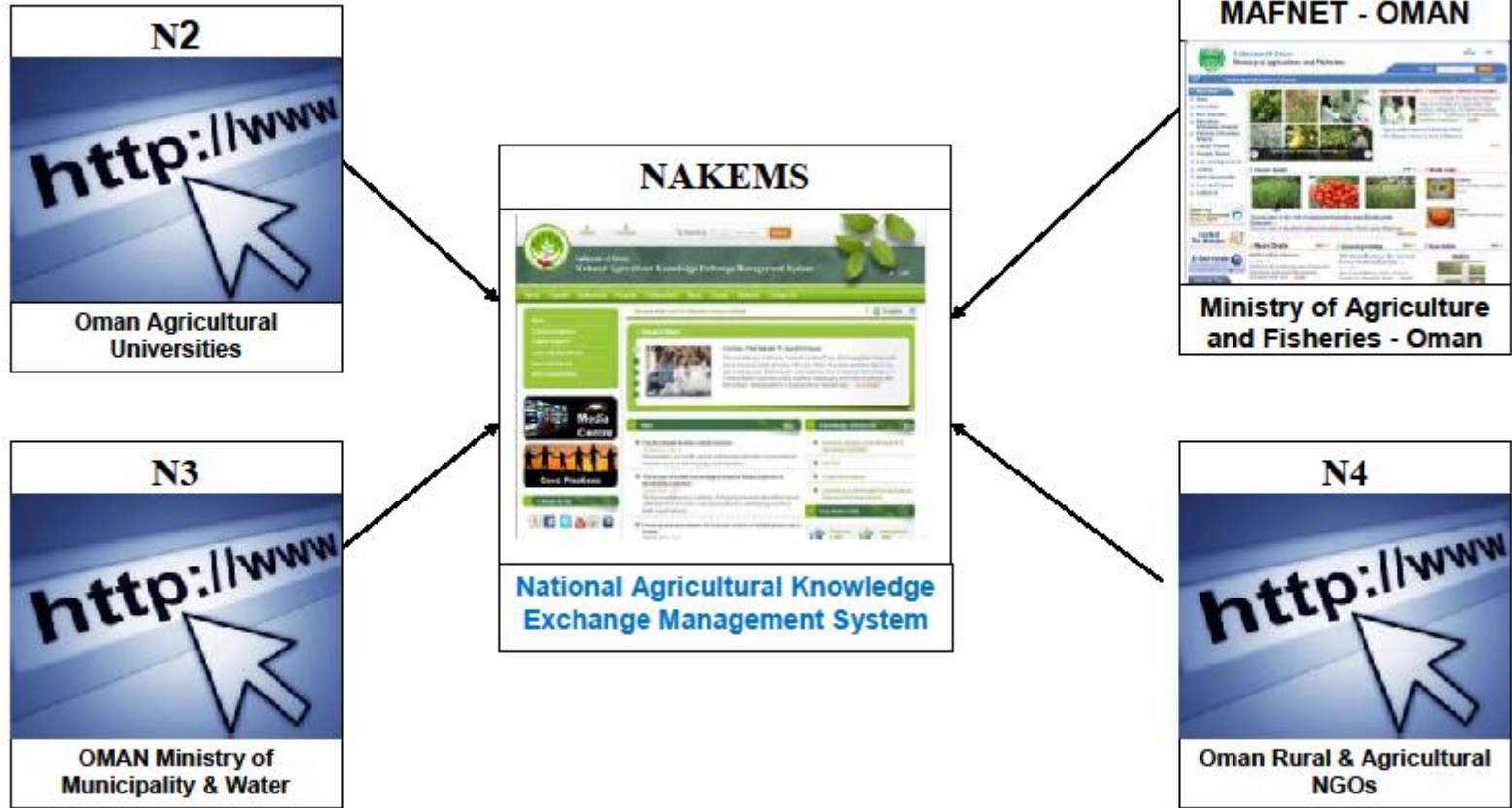
The screenshot displays the NERAKIN (Near East and North Africa Rural & Agricultural Knowledge and Information Network) website. The header includes the FAO logo and the text 'NERAKIN BALS: Knowledge Sharing and Collaboration for Development'. The main content is organized into several columns: 'ABOUT NERAKIN BALS', 'Knowledge Resources', 'GOOD PRACTICES', 'COUNTRY REPORTS', 'EVENTS', 'PUBLICATIONS', and 'PROJECTS'. A 'Regional Web Sites' section at the bottom lists various national agricultural information systems.

The screenshot shows the website of the Agricultural Research Center. The page is titled 'Agricultural Research Center' and features a navigation menu. The main content area includes a 'Home' section with a welcome message, a 'Research' section, and a 'Publications' section. The page is designed with a green and white color scheme and includes various icons and links.

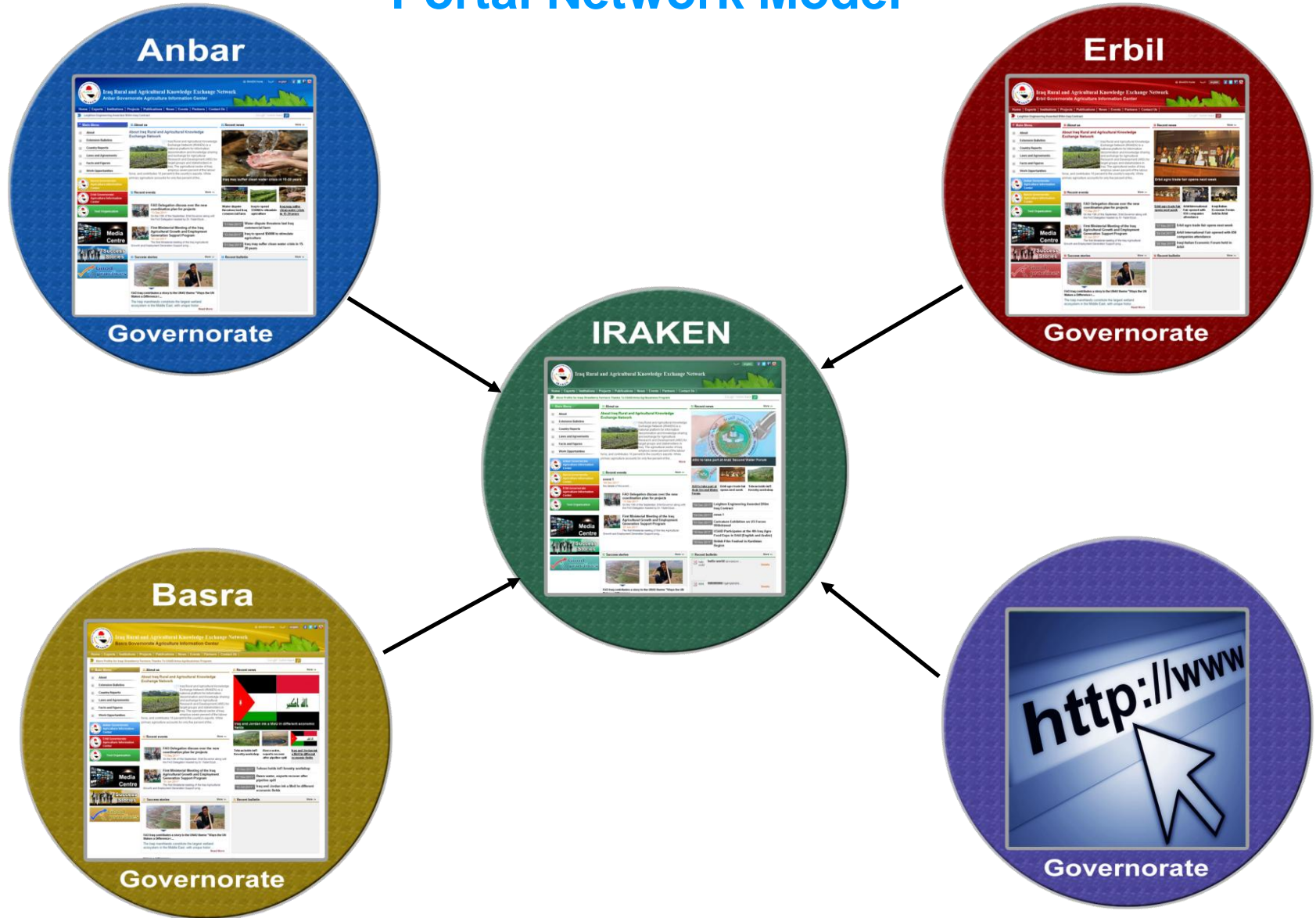
The screenshot displays the website of the Iraq National Agricultural Information System. The page features a navigation menu and a main content area with a large image of a person working in a field. The text on the page includes 'Iraq National Agricultural Information System' and 'Iraq National Agricultural Information System'. The page is designed with a green and white color scheme and includes various icons and links.

The screenshot shows the website of the Jordan National Agricultural Information System. The page features a navigation menu and a main content area with a large image of a person working in a field. The text on the page includes 'Jordan National Agricultural Information System' and 'Jordan National Agricultural Information System'. The page is designed with a green and white color scheme and includes various icons and links.

Relations between NAKEMS and MAFNET and Other Future Institutional Systems in Oman Using RSS Aggregators



Portal Network Model



VERCON Network



- The VERCON Community
- Browse Extension Docs.
- Consult the Expert
- Wheat Expert System
- Rice Expert System
- Bean Expert System
- Grapes Expert System
- Tomato Expert System
- Search DBs
- Extension Documents
- Economics and Statistics
- Growers Problems
- Contact us
- Links on this menu will only be active after you login

What is VERCON ?

The Virtual Extension and Research Communication Network (VERCON) aims to harness the potential of the Internet and apply it to strengthening and enabling linkages among the research and extension components of the national agricultural knowledge and information system. The overall goal of VERCON is to improve, through strengthened research-extension linkages, the agricultural advisory services provided to Egyptian farmers and in particular to resource poor farmers in order to increase production in food and agriculture with the goal of raising farm incomes.

- ### Collaborators
- Food And Agriculture Organization (FAO)
 - Central Lab. for Agricultural Expert Systems (CLAES)
 - Economic Affairs Sector
 - Agricultural Extension and Rural Development Research Institute
 - Central Administration of Agricultural Extension Services (CAAES)
 - Central Administration for Agricultural Research & Experimental Stations
 - Agricultural Directorate of Kafr El-Sheikh
 - Arimon Extension Center
 - Khademia Extension Center

VERCON Login

Username:

Password:

[Arabic](#) [Login](#)

If you're a new user, please [Click Here](#) to create a user name and password

- ### News
- Airing times of the Land Secrets program
 - Training courses
 - Conferences
 - Workshops/Seminars

RADCON Network

شبكة اتصال التنمية الزراعية و الريفية
www.radcon.sci.eg

الصفحة الرئيسية 9 مرعا بكم

رادكون ... شبكة اتصال التنمية الزراعية و الريفية

تهدف هذه الشبكة إلى تنمية الأسر و المجتمعات الريفية و تنمية إحتياجاتهم من المعلومات و الخبرات لتوفير فرص الحياة الكريمة و الحد من الفقر، كذلك يمكن هذه الشبكة هذه المجتمعات من المشاركة الإيجابية للتصرف على مشاكلهم و الإسهام بها. كما توفر هذه الشبكة للمشاركين في التنمية الزراعية و الريفية وسائل التواصل و تبادل المعلومات و الخبرات من أجل خدمة هذه المجتمعات.

الجهات المشاركة

- العاون الإيطالي
- مركز البحوث الزراعية
- معهد بحوث الإرشاد الزراعي والتنمية الريفية
- معهد بحوث تكنولوجيا الأبقار
- معهد بحوث المحاصيل الحقلية
- معهد بحوث الأسمدة
- معهد بحوث أمراض النباتات
- مركز بحوث الإرشاد فديت الأري بسخا
- الإدارة المركزية لالإرشاد الزراعي
- مديرية الزراعة

الجامعات المشاركة

- جامعة الإسكندرية (الشاطئ-دمهور)
- جامعة الإسكندرية
- جامعة قناة السويس (العريش-الإسماعيلية)
- جامعة أسوط
- جامعة كفر الشيخ

المجمع المحلي

- محافظة كفر الشيخ
- محافظة أسوط
- محافظة الدقهلية
- محافظة الإسماعيلية
- محافظة البحيرة
- محافظة الغربية
- محافظة البحيرة

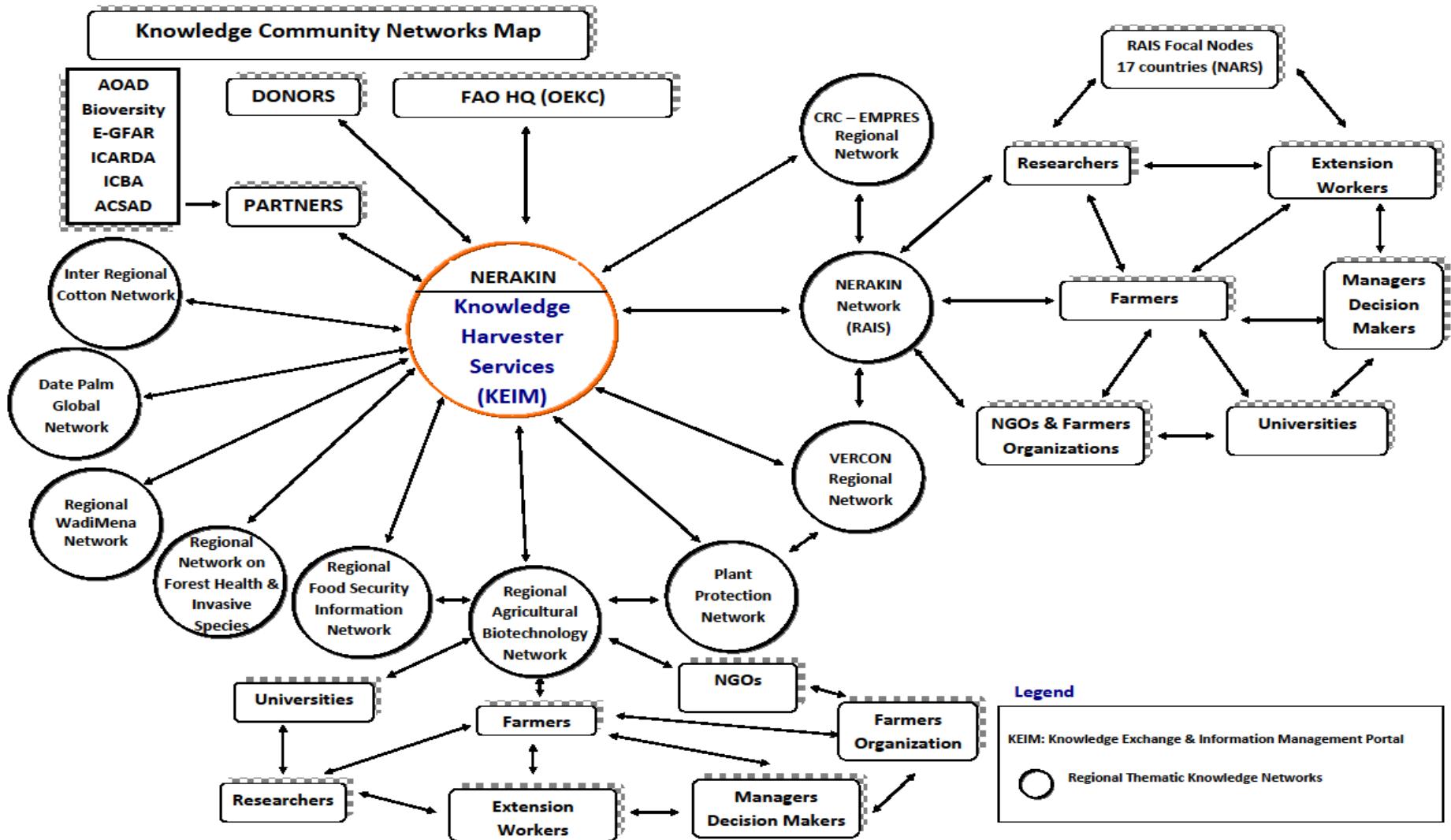
جميع الحقوق محفوظة لشبكة اتصال التنمية الريفية 2007



Regional Activities for NINPs

- **May 2007 in Egypt:** Regional training workshop on “Information Systems for Agricultural Research for Development” in collaboration with AARINENA, GFAR, FAO, ICARDA, NARIC. Participation: Egypt, Iran, Jordan, Lebanon, Oman, Qatar, Morocco, Sudan and Yemen.
- **January 2008 in Oman:** Regional Workshop for Strengthening National ICM Focal Units in Near East Region for strengthening and developing the agricultural information systems and Identifying stakeholders and beneficiaries of IS, and their needs. Participation: Egypt, Jordan, Morocco , Lebanon ,Libya ,Oman, Sudan, Syria, Tunisia, Yemen
- **October 2008 in Syria:** Official launch of Near East and North Africa Rural and Agricultural Knowledge and Information (Nerakin-RAIS)
- **May 2009 in Egypt:** Regional Training Workshop "Building National Capacities in Information and Knowledge In Support of Agricultural Research for Development in Near East Region“ - AARINENA, FAO, GFAR, and ICARDA. Participation: Cyprus, Egypt, Iran, Iraq, Jordan, Lebanon, Morocco, Oman, Sudan, Syria, Tunisia, and Yemen

Knowledge Community Networks Map



Lessons Learned

- **ENABLING ENVIRONMENT:** The need to create an enabling environment that recognizes the value of connectivity;
- **PEOPLE, NOT ONLY TECHNOLOGY:** Networks depend on and work with people and not on technology alone;
- **Institutionalization of networks;**
- **Acquiring knowledge-sharing culture** that is based on collaborative methods and exchange mechanisms;
- **Network Facilitation:** The significance need to network facilitation with face-to-face meetings; and
- **Sustainability:** The need to ensure sustainability and self-financing.

Challenges

- **Decentralization:** establishment of national networks – institutions and policies;
- **Capacity building:** supporting decentralization;
- **Content management:** common approaches (standards and tools);
- **Partnerships:** at regional/international level;
- **Championship and Commitments:** at national level.

Thank You For Your Attention

