

OVERVIEW OF THE STRATEGY

BACKGROUND	1
Why does FAO need a Knowledge Strategy?	1
Dialogue with Member States	
Articulating the Strategy	
Inputs from the FAO Reform Process	
Lessons Learned from Other International Organizations	
Knowledge as an FAO Core Function	
THE FAO KNOWLEDGE STRATEGY	
Vision, Mission and Objectives	
Strategic Principles	5
ROADMAP FOR IMPLEMENTATION	8
One Integrated Roadmap	8
Two Specific Change Objectives	8
PROPOSED CHANGE OBJECTIVES	8
Support to Three IPA Projects as Entry Points	9
Four Steps to Launch the Strategy	
BUILDING MOMENTUM AND ENSURING PROGRESS	12
Leadership and Coordination	
Monitoring and Evaluation	
HOW TO LEARN MORE AND PARTICIPATE	13
ANNEX 1: FAO KNOWLEDGE TERMINOLOGY	14
ANNEX 2: SUMMARY OF STRATEGIC PRINCIPLES	16
ANNEX 3: SUMMARY OF SHORT-TERM ROADMAP	18
ANNEX 4: ILLUSTRATIVE CASE STUDIES FROM THE KNOWLEDGE SHARE	
FAIR, JANUARY 2009	19
Case Study 1: Food and Nutrition Security Community of Solution Exchange	
Case Study 2: National Programmes for Food Security	. 20
Case Study 3: Smallholder productivity improvement in water management, agriculture,	
livestock and aquaculture through FAO's South-South Cooperation Programme	
Case Study 4: Rural Communication Systems	
Case Study 6: Fishery Resources Monitoring System Partnership	
Case Study 7: The Integrated Food Security Phase Classification	
Case Study 8: E-learning to Support Knowledge Sharing	
Case Study 9: Plant Production and Protection Division (AGP): One Global AGP	
ANNEX 5: REFERENCES AND RESOURCES	25
Strategy Working Papers	
Member State and Other Guidance Documentation	. 25
Other FAO Resources	. 26
Knowledge Management Strategies of Other Development Organizations	
Concepts and Good Practices in Knowledge Management	. 27

ACRONYMS

CEB - United Nations System Chief Executives Board for Coordination

CIO - Chief Information Officer

CoC-IEE - Committee of the Conference for the follow-up to the Independent

External Evaluation of FAO

DDG - Deputy Director-General

FAO - Food and Agriculture Organization of the United Nations

FI - Fisheries Department
FO - Forestry Department

HLCP - High-level Committee on Programmes of the United Nations System

Chief Executives Board for Coordination

HR - Human Resources

ICTs - Information and communication technologies

IEE - Independent External Evaluation of FAO

IPA - Immediate Plan of Action for implementation of the IEE

JIU - Joint Inspection Unit

KCE - Knowledge Exchange & Capacity Building Division

KCI - Communication Division

KCT - Information Technology Division

LDC - Least-developed Country

MTP - Medium-Term Plan

OCD - Office for Coordination and Decentralization

OEK - Office of Knowledge Exchange, Research and Extension

PBE - Office of Programme, Budget and Evaluation
PEMS - Performance Evaluation Management System

PWB - Programme of Work and Budget

RBM - Results-Based Management

RR - Regional Representative

SIDA - Swedish International Development Cooperation Agency

BACKGROUND

Why does FAO need a Knowledge Strategy?

- 1. Knowledge¹ is one of the primary tools in FAO's fight against hunger and poverty. The Director-General highlighted this when he introduced the concept of FAO as a Knowledge Organization in his reform proposals beginning in 2005.² The subsequent Independent External Evaluation (IEE) devoted considerable attention to the role of information and knowledge in FAO's current and future mission.
- 2. The IEE made a compelling case that FAO risks marginalization unless it fully exploits its comparative advantages as multidisciplinary integrator, convener and neutral forum to promote greater access to and flow of knowledge. There are now many centers of excellence producing high-quality information and knowledge in FAO's areas of mandate, and the Organization risks progressive irrelevance unless it asserts and develops its capacities for partnership and facilitation in support of access to and flow of knowledge among and flow between all stakeholders.
- 3. Furthermore, FAO's ability to perform effectively is also very much at stake. Knowledge sharing concepts, methods and tools can make a vital contribution to the broad goal of making FAO more efficient, innovative and relevant. A failure to take all possible steps towards this goal will accelerate the process of marginalization.

Dialogue with Member States

4. In 2008, a discussion on knowledge was initiated with Working Group 1 of the Committee of the Conference for the follow-up to the IEE (CoC-IEE).³ A concept note on corporate knowledge management was prepared by the Knowledge Exchange and Capacity Building Division (KCE) and discussed in February 2008, leading to the drafting of a *Strategy Note on Corporate Knowledge Management* which was reviewed with comments by the Working Group in April 2008. This Strategy Note and the CoC-IEE's feedback represent the conceptual starting point for FAO's Knowledge Strategy.⁴

Articulating the Strategy

- 5. In August 2008, resources from the Programme of Work and Budget (PWB) 2008-09 plus additional resources from the Swedish International Development Cooperation Agency (SIDA) were provided to support further development of the Strategy. There were three objectives with respect to the April 2008 Strategy Note:
 - a) <u>Validation</u>. To perform additional research and consultation to confirm essential findings and recommendations;
 - b) <u>Elaboration</u>. To develop the recommendations in more detail and make the conceptual and practical framework more robust; and
 - c) <u>Contextualization</u>. To ensure appropriate integration of the Strategy with other elements of the Immediate Plan of Action (IPA), including FAO's new Strategic Framework, which were developed and presented to the CoC-IEE in 2008 and 2009.

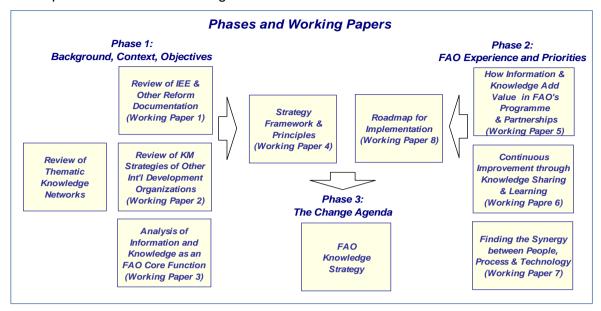
In this Strategy, simple, jargon-free definitions have been adopted for information and knowledge, after Collison and Parcell, *Learning to Fly*, Capstone Publishing, 2004, See Annex 1 for a brief discussion and illustrative case study.

² A review of one of the Director-General's key initiatives, *Thematic Knowledge Networks* (TKN), contributed directly to the initial formulation of the Strategy.

³ In addition, a seminar on knowledge exchange and capacity development was held for Permanent Representatives in January 2008.

⁴ Links to the Strategy Note and the CoC-IEE feedback are provided in Annex 5.

6. The work was approached in three phases and was documented in a series of Working Papers as illustrated in the figure below. ⁵



- 7. **The first phase**, which took place from September 2008 through the end of January 2009, focused on background surveys including: Member State inputs through the IEE and the FAO reform processes in general; a review of the experiences of other international organizations; and the overall programmatic context for information and knowledge as an FAO core function. This phase culminated in a set of ten strategic principles for information and knowledge, which were presented at the Knowledge Share Fair held at FAO in January 2009.⁶ In turn, the submissions and sessions of the Knowledge Share Fair contributed highly relevant case studies and lessons learned for the Strategy, examples of which are presented in Annex 5.
- 8. **The second phase**, which took place from February through June 2009, involved a series of consultations within FAO and with key partners to assess the strengths and weaknesses of FAO's methods of delivering knowledge services and using knowledge sharing techniques to improve its performance. This phase resulted in a roadmap of specific interventions to "operationalize" the principles established in Phase 1.
- 9. **The third phase**, completed between July and September 2009, consolidated the preceding work into documentation, including this Summary, as a basis for communication and engagement with FAO staff and managers, Member States and partners.

Inputs from the FAO Reform Process

- 10. As basic background to the FAO Knowledge Strategy, an in-depth review was conducted of key documents related to FAO reform, the IEE, reviews by the Joint Inspection Unit (JIU) and other relevant sources of perspective and guidance.⁷ The main findings of this review were as follows:
 - a) FAO's role as facilitator of access to and flow of knowledge. A recurring theme is that the Organization is well positioned to promote and facilitate the flow of global knowledge in agriculture – not just its own knowledge assets – and this role should be given increased priority.

_

⁵ All Working Papers are available on the Knowledge Café Web site on the FAO intranet at http://intouch.fao.org/ks/ks_blog/?no_cache=1&tx_wecdiscussion%5Bsingle%5D=493.

⁶ See http://www.sharefair.net/ for more information about the Share Fair.

⁷ References and links to the reviewed documentation can be found in Annex 5.

- b) <u>Continued support for FAO's own data, information and knowledge resources</u>. While there is general support for giving increased priority to facilitating the flow of global
 - knowledge, it is also noted that FAO's own data, information and knowledge resources require continued attention to maximize their contribution to meeting Member States' needs.
- c) Partnership in producing and facilitating the flow of global knowledge. More effective production and flow of global knowledge depend on increasingly working with and through other organizations and Member States themselves.
- d) Enhanced internal knowledge sharing and learning. An increased role for knowledge sharing is recognized and supported to help break down silos and improve performance.
- e) Integration with programme and other core functions. Knowledge management cannot be "bolted onto" existing activities but must be embedded in FAO's processes.
- f) Emphasis on leadership, strategic vision and adequate resourcing. Member States also recognize that improving FAO's performance as a Knowledge Organization will require leadership and commitment, an integrated corporate vision, and adequate resources to support the achievement of that vision.

FAO as Facilitator of Access to and Flow of Knowledge

"As a knowledge organization, FAO's job is to support Members in ensuring that the needs of the world in its area of mandate are fully met – not necessarily to undertake each task itself... FAO must now become strategically integrated to ensure that the world's knowledge of food and agriculture is available to those who need it when they need it and in a form which they can access and use... [including] advocacy... capacity development... and policy advice" (IEE Message 8)

Knowledge Sharing and Learning to Improve FAO Performance

"FAO has, for the most part, talented staff with high levels of technical expertise that are strongly committed to the Organization's mission. However, they are currently discouraged. While often feeling overburdened, they are, in effect, underused. This holds the Organization back from reaching its full potential and undermines its effectiveness."

(IEE Message 11)

g) <u>Key supporting role for technology</u>. The contribution of information and communication technologies (ICT) is important, particularly in the context of finding innovative and appropriate solutions to ensure the exchange of information and knowledge.

Lessons Learned from Other International Organizations

- 11. The knowledge strategies and, in some cases, evaluations of those strategies, of 15 international organizations were reviewed. The major lessons learned were consistent with and extended the inputs from the FAO reform process:
 - a) Knowledge management is about people, with technology as an enabler. Knowledge is a social process and the focus must shift from the "knowledge bank" approach, in which technology supports one-way dissemination, to a more interactive approach in which technology supports collaboration.
 - b) <u>Emphasize in-country knowledge production and sharing for development.</u> There is general support for giving increased priority to facilitating the creation and flow of knowledge at country level to promote ownership and empowerment.
 - c) The key to successful knowledge sharing is in the culture and mindset of the organization. An organization-wide initiative to promote culture change is critical to help address structural issues (i.e. "silo culture"), encourage sharing and learning and thus promote innovation and a coherent, cooperative approach to programme execution.

Knowledge as an FAO Core Function

- 12. Knowledge is explicitly recognized as part of a *core function* in FAO's new Strategic Framework, including the Medium Term Plan (MTP) and PWB. Each core function defines the means of action and the important modalities to achieve results, drawing on the Organization's comparative advantages. Each core function is underpinned by a strategy which will help to ensure coherent approaches, cooperation among organizational units, mutual learning and the pursuit of excellence."
- 13. The Knowledge Strategy supports the objectives of the core function concept and provide an entry point into FAO's

FAO Core Functions

- a) Monitoring and assessment of long-term and medium-term trends
- b) Assembly and provision of information, knowledge and statistics
- Development of international instruments, norms and standards
- d) Policy and strategy options and advice
- e) Technical support to promote technology transfer and build capacity
- f) Advocacy and communication
- g) Interdisciplinarity and innovation
- h) Partnerships and alliances
- programme management cycle for both regular programme and extra-budgetary activities. Furthermore, there are significant interactions between the various core functions: for example, Message 8 of the IEE emphasizes that facilitating access to the world's knowledge of food and agriculture requires an integrated approach which includes advocacy, policy support and capacity development. Finally, knowledge sharing is an important tool to promote the goals of other major IPA priorities such as decentralization, human resources (HR) reform and culture change.
- 14. The Knowledge Strategy is informed wherever possible by the draft strategies of other core functions and the IPA projects as they emerge. A common approach and coordination framework for the core functions will enhance their effectiveness and contribution to FAO':s programmes.

FAO Strategic Framework 2010-19, Conference Document C2009/3, November 2009 http://www.fao.org/uploads/media/C2009K5864EnglishStrategicFr_1.pdf

Paragraph 16, Report of the 35th Session of the FAO Conference, Conference Document C 2008/REP, November 2008 ftp://ftp.fao.org/docrep/fao/meeting/014/k3413e.pdf

THE FAO KNOWLEDGE STRATEGY

Vision, Mission and Objectives

15. The additional research and consultations generally validate the basic strategic formulation presented to Member States in April 2008:

Knowledge at FAO

Vision: FAO will facilitate the access to and exchange of knowledge, as well as its generation, in the domain of agriculture and food security. It will assist its Members in generating, accessing and utilizing knowledge in food and agriculture, as well as any other knowledge that relates to it, required to address Members' individual and collective development and food security goals.

Mission: To make information and knowledge a genuine public good accessible to all Members, especially to the least developed countries (LDCs), through a global knowledge policy.

Objectives: FAO's mainstreaming of knowledge management will support the following objectives:

• <u>Change Objective 1</u>: In FAO's programmes, improving the balance and integration between:

FAO's efforts to *produce* needed information and knowledge and

FAO's efforts to facilitate access to and flow of needed information and knowledge.

 <u>Change Objective 2</u>: In FAO's day-to-day work internally and with its partners, increasing the adoption of information- and knowledge-sharing concepts, methods and tools by FAO managers and teams.

Strategic Principles

- 16. To support and contextualize the strategic vision, ten principles, presented in the sidebar on the following page.
- 17. Principles 1 through 5 position knowledge within FAO's broader planning and programme management framework. The new Strategic Framework represents Member States' needs and priorities and FAO's objectives in meeting those needs and priorities; knowledge supports the achievement of these objectives.
- 18. There are areas of very sophisticated and effective mobilization of knowledge-based methods in FAO,¹⁰ but the performance and level of awareness are uneven. A goal of the Strategy is to raise awareness and capabilities more broadly and consistently by encouraging and supporting "local" leadership within FAO and the growth of networks and communities.
- 19. FAO's recognizes that knowledge in FAO's areas of competence is a global resource, along with other centers of excellence throughout the world. It will consciously assess its role and contribution within that global community, progressively shifting from primarily information products to facilitating access to and flow of knowledge to those who need it, when they need it and in a form they can access and use. This shift will be particularly appropriate when other organizations are producing similar products; therefore the ability

¹⁰ Annex 4 presents case studies illustrating some of FAO's knowledge-based work.

- to develop partnerships with other UN organizations, 11 universities, governments, and private and non-governmental organizations is increasingly important.
- 20. Principles 6 and 7 address the links between knowledge work and the FAO community itself. The FAO programme is implemented by people working individually and collectively. Their capabilities, their organizational context and the support provided to them are fundamental to effective and efficient programme delivery.
- 21. A specific objective is to create an enabling environment though the use of knowledge-sharing methods and tools to assist staff at FAO headquarters and its decentralized offices. FAO technical expertise will be enhanced and harnessed through more networking and interaction with people from inside and outside the Organization.
- 22. Culture change, learning and HR policies are vital to enhancing the use of knowledge to achieve corporate results. Appropriate HR policies, which include incentives and rewards, need to be put in place to facilitate an institutional culture of sharing and collaboration. Close coordination with the HR management function is essential.
- 23. Principles 8 and 9 address the role of technology. Technological innovation has produced many opportunities to improve information and knowledge management and sharing.

 Nonetheless, these innovations must be appropriate and

FAO KNOWLEDGE STRATEGY PRINCIPLES

POLICY AND PROGRAMME

Principle 1: Programmatic role. The FAO Programme expresses Member States' priorities for FAO services, while the Knowledge Strategy and related activities support the Programme by improving the design and delivery of programme

Principle 2: Scope. Knowledge is part of an FAO Core Function with the purpose of "stimulating the generation, dissemination and application of information and knowledge, including statistics." All FAO programmes have a knowledge element at some level.

Principle 3: Results-based. The Knowledge Strategy is conceptually rigorous but practical and results-

Principle 4: Evolution, not revolution. FAO is already an active knowledge manager. It will both build upon successful techniques already being used and encourage innovation.

Principle 5: Global perspective. The Knowledge Strategy acknowledges that FAO is not the direct custodian of all of the world's knowledge of agriculture; rather, FAO will play a key facilitation role in ensuring that the world's knowledge resources are available to those who need it, when they need it and in a format they can access and use.

PEOPLE

Principle 6: Enabling and connecting people. The Knowledge Strategy recognizes the vital role that people – within FAO, in partner organizations, and in Member States themselves – play in generating, disseminating, sharing and acting on knowledge in pursuit of FAO's corporate objectives.

Principle 7: Part of a broader human resources initiative. The Knowledge Strategy is part of a broader strategy to improve the effectiveness and productivity of FAO's staff.

TECHNOLOGY

Principle 8: Supporting role of technology. The Knowledge Strategy recognizes technology as an important enabler but emphasizes that technology should be subordinate to policy, people and process considerations.

Principle 9: Technologically neutral. Since specific technologies change over time, the Knowledge Strategy will strive to be "technology neutral."

IMPLEMENTATION AND SUPPORT

Principle 10: Ongoing and iterative process. To promote continuous improvement, the processes for implementing the Knowledge Strategy are iterative, and every opportunity will be taken to learn from both successes and failures. The scope of support activities associated with the Knowledge Strategy may include coordination, provision of an enabling environment, specific services to technical programmes, and direct services to Member States.

¹¹ For example, inter-agency collaboration on knowledge-related issues is being pursued at country-level through the "Delivering as One" initiative and on a system-wide basis by the High Level Committee on Programme (HLCP) of the United Nations' Chief Executives Board for Coordination.

- responsive to the need: in particular, access of teams, networks and communities to appropriate collaboration tools. 12
- 24. For this and other reasons, FAO's Knowledge Strategy is technology "savvy" but not technology "driven." While recognizing that technology choices and standards have an important role to play, they are considered "tactical" and chosen in a collaborative manner through the appropriate FAO governance processes.
- 25. Very close collaboration is vital between the unit responsible for *technology* the Office of the Chief Information Officer (CIO) and the unit responsible for *knowledge sharing* the Office of Knowledge Exchange, Research and Extension (OEK). This collaboration will be informed by the perspectives on technology provided by the FAO *Root and Branch Review*.¹³
- 26. Finally, Principle 10 emphasizes how promoting knowledge sharing and learning is itself a learning process. To promote continuous improvement, the processes supporting knowledge-based methods and tools in FAO must be iterative. Every opportunity will be taken to learn from both successes and failures through regular monitoring and evaluation. Also, attention must be given to the need for leadership, commitment and coordination to provide an enabling environment and specific services to technical programmes as needed.

12

¹² See, in Annex 4:

⁻⁻ Case Study 4, *Rural Communication Systems* for examples of how appropriate technologies are being supported by FAO to promote knowledge sharing;

⁻⁻ Case Study 6, Fisheries Resources Monitoring System (FIRMS) Partnership, which illustrates how information systems are used to support regional partnerships;

⁻⁻ Case Study 7, *Integrated Food Security Phase Classification (IPC)*, which provides an example of how FAO facilitates "interoperability" through global knowledge classification standards;

⁻⁻ Case Study 8, *E-Learning to Support Knowledge Sharing*, for an overview of some of FAO's work using technology in skills/capacity development and learning initiatives; and

⁻⁻ Case Study 9, *One Global AGP Initiative*, which included the development of a divisional collaborative workspace as a platform for knowledge sharing and coordination.

¹³ FAO Root and Branch Review (RBR), Final Report, April 2009. The RBR was initiated based on IEE recommendations to concentrate on aligning internal processes and organization structure to the strategic mission of the Organization. Its scope included the administrative and support functions and processes (finance, planning and budget, information technology, human resources, procurement, and administrative services) as well as the coordination, authorization and administrative activities of other units. See http://www.fao.org/uploads/media/FAO RBR FinalDeliverable v1 1.pdf

ROADMAP FOR IMPLEMENTATION

- 27. The key to a strategy is in how its concepts are reflected in specific actions. Particular effort has been made to develop a Roadmap that is focused, clear and realistic:
 - a) One integrated Roadmap...
 - b) comprising two specific change objectives...
 - c) providing support to three IPA projects...
 - d) and launched in four change management steps.

One Integrated Roadmap

- 28. With many strategic initiatives under way at FAO, it is vital that there be a clear understanding of the scope and approach of the Knowledge Strategy: what it is trying to achieve, where and how it proposes to intervene, and how it will complement and support other initiatives.
- 29. The Roadmap will substantially define the work programme for those resources within the new OEK and other units contributing to Organizational Result X2 Effective and coherent delivery of FAO core functions and enabling services across Organizational Results in particular as reflected in Indicator X2.4 Percent of products and services related to information and knowledge management and statistics, and associated information systems, implemented in accordance with FAO's corporate strategy.¹⁴
- 30. The roadmap specifically refers to work to be undertaken within the 2010-11 biennium.

Two Specific Change Objectives

- 31. The findings of the research and consultations for the Strategy have been remarkably consistent with regard to the nature of the problems that need to be addressed: the challenges have a *programmatic* component (that is, how FAO addresses information and knowledge as a resource in meeting Member States' needs) and an *organizational* component (that is, how FAO can improve its own performance and its relationships with partners and other stakeholders).
- 32. The box at the right presents specific change objectives for these two aspects. The first of these responds directly to IEE Message 8 regarding the evolution of FAO's role within the global knowledge community. FAO's traditional role as a *provider* of information and knowledge must be complemented with a broader perspective recognizing: (1) that publishing information, regardless of the technologies employed, may not be enough to

Proposed Change Objectives

<u>Change Objective 1</u>: In FAO's programmes, improving the balance and integration between:

FAO's efforts to produce needed information and knowledge

and

 FAO's efforts to facilitate access to and flow of needed information and knowledge.

<u>Change Objective 2</u>: In FAO's day-to-day work internally and with its partners, increasing the adoption of informationand knowledge-sharing concepts, methods and tools by FAO managers and teams.

achieve the desired programme goals;¹⁵ (2) FAO has unique responsibilities and advantages as a convener, neutral forum, integrator of global knowledge and facilitator of

¹⁴.Page 29, FAO Strategic Framework 2010-19, Conference Document C2009/3, November 2009 http://www.fao.org/uploads/media/C2009K5864EnglishStrategicFr 1.pdf.

¹⁵ As already noted, Message 8 of the IEE (see Paragraph 28, FAO: The Challenge of Renewal: Report of the Independent External Evaluation of the Food and Agriculture Organization of the United Nations (2007) ftp://ftp.fao.org/docrep/fao/meeting/012/k0827e02.pdf) stresses that FAO's role in

- local knowledge sharing and exchange; and (3) the two roles producing and facilitating complement one another.
- 33. In practical terms, facilitating access and flow can take many forms within a *global knowledge policy*, including but not limited to:¹⁶
 - a) promoting and supporting networks and communities;
 - b) improving the quality and effectiveness of the knowledge-sharing and learning activities in FAO's policy support, capacity development and advocacy work;
 - c) working specifically to reduce impediments to accessing knowledge, such as copyright restrictions and language coverage; and
 - d) promoting "interoperability" of information systems and repositories through partnerships, agreements, standards, and appropriate tools and infrastructure.
- 34. The second proposed change objective addresses the significant contribution that knowledge-sharing concepts, methods and tools can make to enhance FAO's capacity to perform and innovate. Consultations with FAO staff¹⁷ identified many opportunities through training and support in knowledge sharing. Their proposals were consistent with the priorities identified by major initiatives such as Performance Evaluation Management System (PEMS), Culture Change and Staff Development.

Support to Three IPA Projects as Entry Points

- 35. The change objectives of the Knowledge Strategy have relevance to many IPA projects, but three of them *Decentralization, Results-Based Management and HR* offer particular challenges and opportunities for impact. Furthermore, these three IPA projects are the most significant among the changes FAO is seeking. Finally, there are significant and critical interdependencies between these projects which are precisely where the contribution of knowledge sharing might be made.
- 36. The positioning of the Knowledge Strategy within these IPA projects is illustrated in the diagram on the following page.
- 37. Decentralization, which emphasizes "Functioning as One" so that the full resources of the Organization work together to meet Member States' needs, is clearly enabled by

promoting access to the world's knowledge of food and agriculture will also require facilitation, advocacy, policy support and capacity development.

- -- assessing the value of materials and collaboration with search engine providers in simplifying the location of quality information;
- -- identifying and implementing "quick wins" to showcase the benefits of information and knowledge management given the lack of common understanding of knowledge management in FAO;
- -- addressing the fact that knowledge management in FAO, though implicit in everyone's role, is not formally acknowledged as a specific responsibility;
- -- embedding and mainstreaming knowledge management and sharing into FAO's activities and processes; and
- -- coordinating closely with other strategies developed under the new FAO Strategic Framework, in particular the cross-cutting areas of Gender Mainstreaming and Capacity Building Strategy.
- ¹⁷ Working Paper 6: Continuous Improvement through Knowledge Sharing and Learning, KCE (June 2009).
- ¹⁸ Functioning as One is the initiative responding to issues raised by the IEE about the coherence and effectiveness of FAO's field structure. See for more details paragraphs 998-1079, FAO: The Challenge of Renewal: Report of the Independent External Evaluation of the Food and Agriculture Organization of the United Nations (2007) ftp://ftp.fao.org/docrep/fao/meeting/012/k0827e02.pdf.

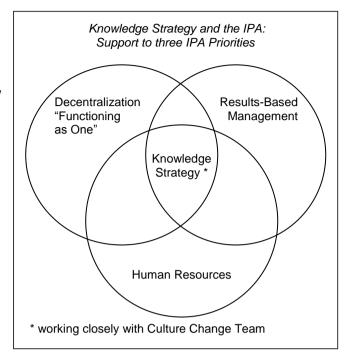
FAO Knowledge Strategy

¹⁶ For example, the Strategy Note of April 2008 identified the following additional areas:

improved knowledge sharing between all participants: FAO staff at all locations, people in

partner organizations, and people within Member countries themselves.¹⁹

- 38. Knowledge sharing is also essential to the successful implementation of results-based management. The new Strategic Objective teams, for example, will need effective flows of information and knowledge to function across disciplines and geographical boundaries.
- 39. Thirdly, the objective of the IPA project on HR is that "FAO is recognized as an employer that implements best practices in performance- and peoplemanagement, is committed to the development of its staff and capitalizes on the diversity of its workforce." Knowledge-sharing concepts, methods and tools are an



essential competency in those best practices as they increase the quality and number of staff learning opportunities and improve the effectiveness of the work that is performed, making it more timely, relevant and coherent.

- 40. In all three of the above IPA areas, FAO is embarking on *new ways of working,* and the Knowledge Strategy will help harness these opportunities. Furthermore, the case can be made that none of the three can achieve its broader goals without the other two: knowledge-sharing methods and tools can promote the needed integration.
- 41. The Culture Change initiative is seen more as a partner than a project to be supported. Knowledge sharing is both a means and an end to Culture Change; likewise, changes in awareness and attitude are vital to the success of the Knowledge Strategy.

Four Steps to Launch the Strategy

- 42. Throughout the consultations for this Strategy, participants repeatedly returned to a basic theme: what is knowledge sharing about and why should people at FAO care? The perspective of *promoting constructive change* is essential to the Roadmap. Four steps are required, summarized in the following paragraphs and in Annex 3.
- 43. **Step 1: Assess needs and establish the case for change.** A convincing argument has been made that FAO needs to change its approach to information and knowledge sharing, both internally and in support of programme objectives. The stakes are significant, but work must be done to ensure that this is effectively communicated and understood.

¹⁹ The *Evaluation of Thematic Knowledge Networks* provides a concise summary of FAO's experience to date with structured knowledge sharing through communities and networks across disciplines and geographical locations.

²⁰ http://intouch.fao.org/renewal/ipa/human resources/.

- 44. A *needs assessment*²¹ will raise awareness of the need for change as well as sharpen the focus on how best to approach the change itself. The three IPA projects provide a useful context for this assessment.
- 45. **Step 2: Build the required coalitions.** The approach of the Knowledge Strategy will be to form a "coalition of coalitions" in which sponsors within technical departments and decentralized offices form their own change initiatives but work collectively towards a shared vision. These local coalitions comprise the local management teams the leaders of Strategic Objective Teams, departmental and divisional management, the lead technical officers for Unit Results in the PWB, and specialist staff/groups such as the information units in the Fisheries, Forestry and other departments.
- 46. **Step 3: Share and enhance the vision.** An *outreach* programme, including some form of *social networking and collaboration support* is necessary. For example, the *Knowledge Café*²² is supporting knowledge-sharing activities generally and can be the platform for discussion of Strategy implementation. Also, the regular training sessions and workshops on knowledge sharing will be expanded to meet the needs of the staff involved.
- 47. The general approach will be to work towards a "tipping point" where a message gains traction and takes on a life of its own. Until then, however, the campaign must be maintained.
- 48. **Step 4: Secure short-term wins**. The change management approach suggests that 2010 will be focused on concrete, achievable targets to gain confidence and buy-in. Examples of "short-term wins" are shown in Annex 3; there is no doubt that others will arise as coalitions are established and the vision is promulgated. Of particular importance is the support to the IPA projects: specific short-term objectives will be established with the leadership of the respective projects.

²¹ There is a significant body of good practice for such surveys and "audits" in the knowledge management literature that FAO can draw on. See, for example, the discussion of "knowledge-based benchmarking" in *Learning to Fly*, C. Collison and G. Parcell, Capstone Publishing, 2004) as well as the recommendations in *Knowledge Management Framework and Roadmap: Strategic Approaches to Leverage FAO as a Knowledge Organization*, L. Lamoureux, July 2007 and *Knowledge Management Road Map: Supporting Document*, I. Wooler, July 2007.

²² http://intouch.fao.org/ks/ on the FAO intranet.

BUILDING MOMENTUM AND ENSURING PROGRESS

49. One of the most consistently cited lessons learned from the experiences of other international organizations is the importance of an effective organizational context and adequate resources for the Knowledge Strategy, including leadership, coordination and monitoring.

Leadership and Coordination

- 50. In a change management context, the terms leadership and sponsorship involve "a manager's support for a change [through] active and visible engagement throughout the project, effective communications to employees and coalition building with peers and subordinates."²³ Furthermore, "as models of leadership shift from organizational hierarchies with leaders at the top to more distributed, shared networks, a lot changes. For those networks to work with real awareness, many people will need to be deeply committed to cultivating their capacity to serve what's seeking to emerge."²⁴
- 51. The concept and role of leadership was given considerable attention during the consultations for this Strategy. Three types of leadership will be necessary to build momentum and ensure progress:
 - a) "<u>Top-down</u>" <u>leadership.</u> Support and visible engagement from senior managers are essential. Senior managers cross-pollinate among different lines of work and encourage their staff to do the same, meanwhile cultivating a clear and compelling vision.
 - b) "Middle-out" leadership. The literature²⁵ reports that the most meaningful innovations in organizations begin in teams led by middle management. The Strategy will promote this form of leadership through the support of local knowledge champions and the "coalition of coalitions" approach. Middle managers participate in networks and communities, as well as in cross-departmental groups and teams, and encourage their staff to do the same. They are open to changes in strategic and tactical direction based on what emerges from the work of groups, teams and communities.
 - c) "Bottom-up" leadership. The potential of bottom-up leadership was amply demonstrated during the Knowledge Share Fair in January 2009, during which staff members of all Rome-based UN agencies at all levels visibly engaged in discussions of knowledge-sharing topics to improve their effectiveness. This engagement is also demonstrated by the continued high level of interest in knowledge-sharing workshops and training courses on facilitation techniques and collaborative tools. The key to cultivating bottom-up leadership is encouraging initiative and interest on behalf of all staff, teams and communities, and providing sponsorship.
- 52. The new organizational structure of FAO provides clear indications of where the leadership and coordination of the implementation of the Knowledge Strategy reside. Overall leadership will be provided by the Deputy Director-General (DDG) for Knowledge. OEK, which supports the DDG for Knowledge, will assist in the coordination of Strategy implementation. Close collaboration will be required between OEK, the CIO and, as appropriate to their strategic objectives, the technical, operational and administrative units at headquarters and in decentralized offices.

²³ Harvard Business Review on Knowledge Management, HBR Paperbacks, 1998.

²⁴ Presence: Human Purpose and the Field of the Future, P. Senge, O. Scharmer, J. Jaworski, and B. S. Flowers, Doubleday, 2004.

²⁵ See, for example, Slack: Getting Past Burnout, Busywork, and the Myth of Total Efficiency, T. DeMarco, Broadway Books, 2002 and Presence: Human Purpose and the Field of the Future, P. Senge, O. Scharmer, J. Jaworski, and B. S. Flowers, Doubleday, 2004.

53. A variety of formal bodies and informal communities will assist in coordinating the work. The formal bodies will be established within the overall structure of inter-departmental working groups and senior policy-setting bodies currently being examined and consolidated. Informal communities will be supported and facilitated by OEK.

Monitoring and Evaluation

54. Monitoring and evaluation of Strategy implementation will be approached within the overall model for results-based management now being formulated. The framework for monitoring and evaluating progress against the two Change Objectives must be put in place during the detailed planning of the Programme of Work for the 2010-11 Biennium.

HOW TO LEARN MORE AND PARTICIPATE

55. FAO staff can follow developments and resources associated with the Strategy through the Knowledge Café Web site (http://intouch.fao.org/ks/).

ANNEX 1: FAO KNOWLEDGE TERMINOLOGY

In this Strategy, simple, jargon-free definitions have been adopted for information and knowledge (after Collison and Parcell, *Learning to Fly*, Capstone Publishing, 2004):

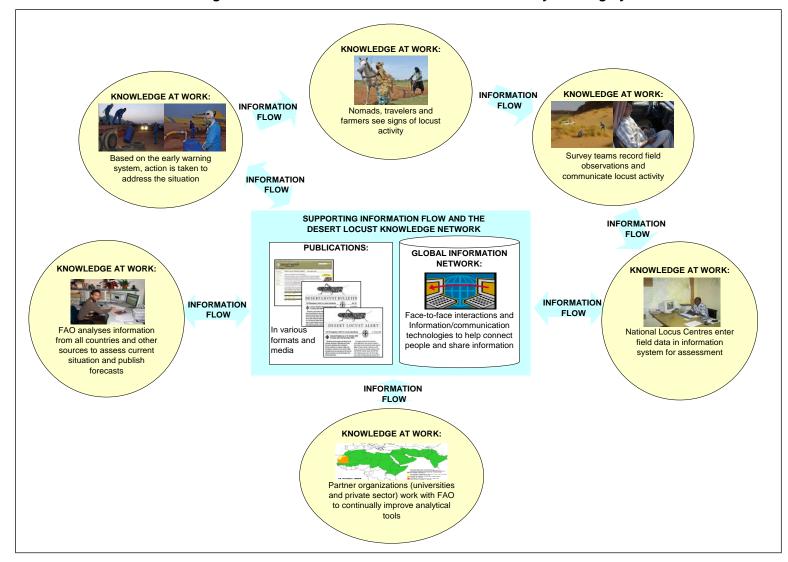
- a) *knowledge* is "what is in people's heads" in the form of *know-how* (including know-how, know-what, know-who, know-why and know-when) which can be shared through human interactions in, for example, networks and communities;
- b) *information*, also referred to as "explicit knowledge," is what has been written down and/or stored in computer or other systems and can be shared, for example, through publishing, databases and information systems; and
- c) knowledge management is about capturing, creating, distilling, sharing and using know-how.

To give practical meaning to these terms, a brief case study has been prepared examining the knowledge-based processes supporting **the Desert Locust early warning system** operated by FAO's Locust and Other Migratory Pests Group in the Plant Production and Protection Division. This programme dates from the 1930s. FAO took over its operation more than three decades ago. More recently, it has become an important component of the Emergency Prevention System for Transboundary Plant Pests and Diseases (EMPRES). The purpose of the Desert Locust component of EMPRES is to strengthen the management capacity of locust-affected countries with the aim of minimizing the risk that plagues will develop. It was designed as a collaborative programme in which affected countries, regional organizations, donors, and FAO participate in the development of improved preventive control strategies.

The figure on the following page depicts the overall flow of the system. The example illustrates how *knowledge* is applied to gather and interpret *information* in a process that continually adds value in terms of the programme objectives. People with the required knowledge (i.e. know-how) are required at each major step. Appropriate technology, facilitation and other forms of support are required to connect these people and to process and share the information being provided. FAO provides the overall facilitation and coordination.

The overall flow is typical of how an effective early warning system can be built. The interactions between people, technology and processes – as well as the support and facilitation requirements – can begin to be appreciated. One can also see how FAO has a unique comparative advantage to organize the support and facilitation: a global perspective, access to governments, its status as a neutral forum, etc.

Knowledge and Information at Work: FAO Desert Locust Early Warning System



FAO Knowledge Strategy Page 15 of 27

ANNEX 2: SUMMARY OF STRATEGIC PRINCIPLES

Principle	Rationale and Significance			
POLICY AND PROGRAMME				
Principle 1:Programmatic role. The FAO Programme expresses Member States' priorities for FAO services, while the Knowledge Strategy and related activities support the Programme by improving the design and delivery of programme outputs.	 FAO's formal programme planning and management processes, including the new Strategic Framework of strategic objectives and organizational results, are the primary means by which Member States express their needs and priorities. The Knowledge Strategy should not be a separate response to those needs but rather support the achievement of organizational results. At the same time, the Knowledge Strategy may include processes to promote a re-examination of programme priorities and activities during programme formulation. 			
Principle 2: Scope. Knowledge is part of an FAO Core Function with the purpose of "stimulating the generation, dissemination and application of information and knowledge, including statistics." All FAO programmes have a knowledge element at some level.	 It must be recognized that information and knowledge flow in all programme activities; the purpose of the Knowledge Strategy is to examine ways to improve the effectiveness of these flows. Therefore, the Knowledge Strategy is not something that is "bolted onto" programme activities, nor does it represent a competing priority to a technical focus or specialization. Regarding statistics, the Knowledge Strategy should be viewed as providing a context for FAO's statistics programme without, however, fully articulating it. The strategy for FAO's statistics programme is separate but complementary. 			
Principle 3: Results-based. The Knowledge Strategy is conceptually rigorous but practical and results-based.	 A corollary of Principles 1 and 2 is that highest priority will be given to knowledge investments and activities that are directly linked to improved programme design and delivery. The Knowledge Strategy is a means to an end, not an end it itself. Measurable (quantitative and qualitative) indicators of use of any products developed and techniques employed are needed through ongoing monitoring activities as outlined in Principle 10 below. 			
Principle 4: Evolution, not revolution. FAO is already an active knowledge manager. It will both build upon successful techniques already being used and encourage innovation.	 There are already areas of very sophisticated and effective use of knowledge-based techniques in FAO, but the performance and level of awareness are uneven. A goal of the Knowledge Strategy is to raise awareness and capabilities more broadly and consistently. An evolutionary approach will encourage and support "local" leadership within FAO divisions and the growth of informal networks and communities. 			
Principle 5: Global perspective. The Knowledge Strategy acknowledges that FAO is not the direct custodian of all of the world's knowledge of agriculture; rather, FAO will play a key facilitation role in ensuring that the world's knowledge resources are available to those who need it, when they need it and in a format they can access and use.	 This observation, which was emphasized in the IEE, requires a conscious assessment of FAO's comparative advantages. Opportunities may exist to balance FAO's role in producing knowledge products with knowledge facilitation and intermediation. This shift may be particularly appropriate when other organizations are producing similar products – the ability to develop partnerships will become increasingly important. Member States are increasingly active participants in knowledge sharing and will be seen as key partners. 			
PEOPLE				
Principle 6: Enabling and connecting people. The Knowledge Strategy recognizes the vital role that people – within FAO, in partner organizations, and in Member	 The delivery of FAO's programme is implemented by people working individually and collectively. Their capabilities, their organizational context and the support provided to them are fundamental to effective and efficient programme delivery. The Knowledge Strategy seeks to create a sharing and 			

Principle	Rationale and Significance
States themselves – play in generating, disseminating, sharing and acting on knowledge in pursuit of FAO's corporate objectives.	enabling environment though the use of knowledge-based techniques, such as networks and communities, to assist staff at headquarters and regional/sub-regional office to manage and use knowledge among themselves and with people in partner organizations and Member States.
Principle 7: Part of a broader human resources initiative. The Knowledge Strategy is part of a broader strategy to improve the effectiveness and productivity of FAO's staff.	 The Knowledge Strategy recognizes the importance of culture change and learning in improving the use of knowledge to achieve corporate results. The Knowledge Strategy recognizes the importance of close coordination with the HR management function at all points in the HR management cycle.
TECHNOLOGY	

Principle 8: Supporting role of technology. The Knowledge Strategy recognizes technology as an important enabler but emphasizes that technology should be subordinate to policy, people and process considerations.

- Technology-based innovation has produced many opportunities to improve information and knowledge management and sharing. Nonetheless, these innovations must be appropriate and responsive to the knowledge requirement at hand; in particular, access by communities to relevant technologies must be considered.
- For this and other reasons, FAO's Knowledge Strategy aims to be technology "savvy" but not technology "driven".
- Principle 9: Technologically neutral. Since certain technologies change over time, the Knowledge Strategy will strive to be "technology-neutral".
- While technology choices and standards have an important role to play in implementing the Knowledge Strategy, these considerations will be considered "tactical" and made as needed in a collaborative manner through the appropriate governance processes.

IMPLEMENTATION AND SUPPORT

Principle 10: Ongoing and iterative process. To promote continuous improvement, the processes for implementing the Knowledge Strategy are iterative, and every opportunity will be taken to learn from both successes and failures. The scope of support activities associated with the Knowledge Strategy may include coordination, provision of an enabling environment, specific services to technical programmes, and direct services to Member States.

The development and implementation of the Knowledge Strategy is based on the following core function service model:

- Coordination, monitoring and resource mobilization. The first role addresses the need for a coordination mechanism to develop an overall strategy and generally assist in its implementation and monitoring across the FAO programme. This may also include, where appropriate, assistance in seeking extra-budgetary support.
- Enabling environment and services. By their nature, all core functions will require various "enabling" support capabilities including standards and good practices, networks and communities, and specialized administrative support. Some, like information/knowledge/statistics, rely on technological infrastructure as well.
- Specific services and assistance to technical programmes.
 Many core functions involve the use of specialized skills that should be readily available to units delivering programme outputs.
- 4. <u>FAO-wide and direct products and services</u>. Finally, it is acknowledged that some aspects of the delivery of core functions may warrant the formulation of specific, discrete organizational results under strategic objectives.

ANNEX 3: SUMMARY OF SHORT-TERM ROADMAP

	Essential Steps	Change Objective 1: In FAO's programmes, improving the balance and integration between: • FAO's efforts to produce needed information and knowledge and • FAO's efforts to facilitate access to and flow of needed information and knowledge	Ensuring integration and synergies through support to 3 specific IPA priorities: RBM Decentralization HR reform	Change Objective 2: In FAO's day-to-day work internally and with its partners, increasing the adoption of information- and knowledge-sharing concepts, methods and tools by FAO managers and teams
1.	Establish the case for change	Approach works; Member States demand it; FAO's future depends on it; more and more organizations change the way they work towards more facilitation, geographical distribution, networks and partnerships	Needs assessment	Better use of time; regular training in skills development; greater job satisfaction: essential to other significant changes (e.g. decentralization); recognition of efforts as part of PEMS; more opportunities to make change
2.	Build the required coalitions	All departments, external partners, including Rome-based UN agencies, and people in decentralized offices	Also OCD, RRs, IPA coordination structures	All departments, Rome-based UN partners, and people in decentralized offices
3.	Share and enhance the vision	Practical meaning of "facilitating access to and flow of information and knowledge" provided by IPA projects and the new MTP and PWB, shared through RBM workshops and work planning for PWB 2010-11, case studies, brochures, blog posts, informal seminars, etc.	Through formulation of specific support objectives and shared through IPA reporting lines	Workgroup focus: better meetings, more efficient access to information needed by the workgroup, steps to overcome geographical boundaries. Shared through road show, to departments, through Staff Development, awareness raising on importance of knowledge sharing tools and methods
4.	Secure short-term wins	Short-term wins might include: measurable shifts in 2010 work plans allocation of budget for more facilitation support for training in applied knowledge sharing concepts, methods and tools at headquarters and in the field increased participation in networks and communities explicit support for knowledge-sharing "champions" systematic knowledge sharing and learning within and across FAO projects. Knowledge gained from monitoring and evaluation should be shared to improve programme effectiveness and influence policies	Through formulation of specific support objectives and reported through IPA reporting lines	Short-term wins might include: participation in training activities on knowledge-sharing tools and methods provide regular support, with help of KCT/CIO where appropriate, for collaborative tools increased participation in networks and communities increased working in cross-functional/cross-departmental/cross-divisional groups and teams improved audio-video conferencing possibilities in all locations Inventory of existing resources (good practices, information systems, people, etc.) explicit support for knowledge-sharing "champions" include knowledge sharing within the job descriptions and evaluate as a competency

ANNEX 4:

ILLUSTRATIVE CASE STUDIES FROM THE KNOWLEDGE SHARE FAIR, JANUARY 2009

From 20-22 January 2009, FAO was the stage for an innovative event called the *Knowledge Share Fair for Agricultural Development and Food Security*. This initiative was organized by FAO, in collaboration with Bioversity International, the ICT-KM programme of the Consultative Group for International Agricultural Research (CGIAR), IFAD and the World Food Programme. The goal of the Share Fair was to provide an interactive experience that would allow staff and the Rome-based constituents to: (a) share and learn from each other's good practices; (b) experiment with tools and methodologies for knowledge sharing; (c) create linkages and networks for future collaboration between the organizations; and (d) develop ideas to support and enhance knowledge sharing within and across our organizations.

During the Fair, 700 registered participants roamed the building, taking part in the numerous activities on offer. The 112 planned sessions around eight themes, as well as the many spontaneous ones organized by the participants during the three days, covered various agricultural development and food security issues but focused on the knowledge-sharing aspects of the initiatives. The case studies that follow are typical of the submissions presented and serve to illustrate elements of the Knowledge Strategy.

More information about the Share Fair can be found at http://www.sharefair.net/.

List of Case Studies:

- 1. Solution Exchange
- 2. National Programmes for Food Security
- 3. Smallholder productivity improvement in water management, agriculture, livestock and aquaculture through FAO's South-South Cooperation Programme
- 4. Rural Communication Systems
- 5. The Urban Forest Community
- 6. Fishery Resources Monitoring System (FIRMS) partnership
- 7. The Integrated Food Security Phase Classification (IPC)
- 8. E-learning to support knowledge sharing
- 9. Plant Production and Protection Division (AGP): One Global AGP Initiative

Case Study 1: Food and Nutrition Security Community of Solution Exchange

Solution Exchange, an initiative of the United Nations agencies in India, is harnessing the power and passion of communities of practice to help attain India's development objectives and the Millennium Development Goals by connecting the nation's development professionals and enabling them to share and learn from each other in a collaborative way

The initiative intends to capture valuable tacit knowledge gained through practitioners' experience and share it with others. Therefore, by creating a free impartial space where professionals are welcome to share their knowledge and experience, it fosters better access to and nurturing of knowledge in a user-friendly environment.

Members represent a wide range of perspectives from government, NGOs, donors, the private sector and academia. They are organized into communities of practice built around the framework of the Millennium Development Goals. Through moderated e-mail groups, members interact on an ongoing basis, building familiarity and trust, and gaining knowledge that helps them contribute more effectively – individually and collectively – to the nation's development challenges

Today 13 communities of practice are up and running. FAO India anchors the Food and Nutrition Security (FNS) community, bringing together professionals from a wide range of organizations and sectors concerned with meeting the country's food and nutrition security goals. The community helps members promote sustainable improvements in food security and reduce malnutrition among vulnerable households and population groups, by tapping into their collective knowledge and shared concerns.

Key focus areas of the community of practice are: Sustainable Food Production, Technology, Livelihoods; Food Processing, Market Linkages; Food Quality and Safety; Climate Change, Bio-diversity, Natural Resource Management; Efficacy of Government Programmes and Policies; Malnutrition and Under-nutrition, Nutrition Awareness and Remedies.

Discussion threads from e-mail-based services are synthesized into consolidated replies featuring the experiences and resources recommended by contributors and researched from published material all compiled into a brief but comprehensive composite with structured documentation.

Today the FNS community has a membership of over 2,500 and over the past four years of active knowledge sharing has produced over 150 consolidated replies (uniquely blending different forms of knowledge). The community has influenced policies and programme implementation, improved the capacities of individuals and organizations, and enhanced the culture of knowledge sharing.

More information: www.solutionexchange-un.net.in email: gopi.ghosh@fao.org

Case Study 2: National Programmes for Food Security

FAO assists member countries in their effort to achieve food security for their population. In the framework of the activities implemented through the Italian Special Contribution to the Global Trust Fund for Food Security and Food Safety, the Italian government has funded seven country projects in West Africa (The Gambia, Guinea, Guinea Bissau, Liberia, Mali, Senegal and Sierra Leone), to be implemented following a common strategy.

The main objective of the almost five-year agricultural development projects is to contribute significantly to the development of African agriculture into a more modern, competitive and commercially dynamic sector, while building on the achievements and lessons learned from playing a major role in the National Programmes for Food Security.

The proposition to implement the projects through a common strategy implied a shared approach to planning and managing the individual country projects as well as a universal communication platform. The key element in this strategy is the presence of a Common Coordination Unit, based in Dakar, which ensures the timely and coordinated implementation of all the national projects. A launching workshop, held in Senegal in 2008, and a separate meeting on planning, monitoring and evaluation of the projects started to develop a shared approach to management. One of the important challenges that remains is the delay in establishing a communication platform which should not only support the execution of the projects, but also allow for the development of a communication strategy between the actors of the different countries as well as within each country.

More information: http://www.fsca-pisa.org/ **email:** Daniele.Salvini@fao.org, Riccardo.Delcastello@fao.org, madhy.bamba@fao.org

Case Study 3: Smallholder productivity improvement in water management, agriculture, livestock and aquaculture through FAO's South-South Cooperation Programme

FAO launched the Special Programme for Food Security (SPFS) in 1994, two years ahead of the 1996 World Food Summit, as a flagship programme to assist its developing member countries to reduce hunger and malnutrition. It was designed to improve household food security and rural livelihoods and stimulate the growth of local economies.

One major element of SPFS was the support by FAO's South-South Cooperation Initiative (SSC). This programme provides experts from the South who have a better understanding of the development context of the South and of practical solutions that are cost-effective and socially, culturally and economically appropriate. The unique value of South-South knowledge

networking is that it provides access to know-how that was generated in the South and is therefore of particular relevance to the specific development needs and potentials of the South.

Nigeria hosted the largest SSC programme between 2003 and 2007, with over 500 Chinese experts and technicians. The SSC programme introduced over 230 new technologies in areas such as water management, agriculture, livestock and aquaculture.

To achieve visible and long-term impact in a country such as Nigeria, the knowledge transfer programme is essential and must be sustained. In this regard a team reviewing the SSC programme observed that some very useful, simple and, with some exceptions, low-cost technologies, tools and machinery were developed/demonstrated by the SSC in close cooperation with its Nigerian counterparts and farmers. Many of these are innovations for Nigeria and have immediate market potential, including Chinese sweet millet, artificial bee queen, hatching machines for fishery, long hoes, and incubators for poultry. The technologies in apiculture and aquaculture are in particularly high demand

More information: cheikh.sarr@fao.org, madhy.bamba@fao.org, karel.callens@fao.org

Case Study 4: Rural Communication Systems

Over the last 30 years FAO has been implementing several Rural Communication Systems in developing countries to support agriculture and sustainable rural development. These systems have been based on the use of *Communication for Development* methods and tools integrating different media ranging from rural radio to new information and communication technologies with the use of participatory communication methodologies. Within this framework, field experience has been gained especially in relation to community outreach, technology innovation and sustainable natural resources management. A few examples of Rural Communication Systems include:

- The Rural and Agricultural Development Communication Network (RADCON). This project was implemented by FAO with Government of Egypt. The project links over 155 trained village facilitators (at least one man and one woman per village) in 50 resource-poor rural villages with agricultural and rural development services both online and offline through an extensive network of experts and mentors in research, extension, health and nutrition, environmental waste, women's affairs, community development and rural enterprise. A proposal for the expansion of the project throughout Egypt has been developed and included in the Government of Egypt Agriculture Strategy 2011-2030.
- Communication for Natural Resources Management and Sustainable Agriculture. This project was implemented in Bolivia with FAO support from 2002 to 2007 and focused its actions on a participatory communication approach to implement communication and information plans based on key topics prioritized by the municipalities. The project promoted the implementation of a Rural Communication System based on the integration of the following elements: (a) a rural communication centre (CARENAS) that developed into a foundation; (b) a rural information and communication system (SICORD), comprising municipalities, NGOs, development programmes and communication services; and (c) local information and communication plans.
- Rural Radio. Despite the latest technological advances in the communication field, radio is still the most pervasive, accessible, affordable and flexible mass medium available. In rural areas, it is often the only medium that can rapidly disseminate to large and remote audiences critical information about markets, weather, crops and livestock production, and natural resource protection. FAO has been involved in rural radio since the 1960s and is still considered a leader in this field. Rural radio is a two-way process, requiring the active participation of the communities in the planning and production activities of the radio broadcasts.

 $\begin{tabular}{ll} \textbf{More information:} & \underline{riccardo.delcastello@fao.org} \ , \underline{may.hani@fao.org} \ , \\ \end{tabular} \ , \\ \end{tabular}$

Mario.acunzo@fao.org, clare.ofarrell@fao.org

Case Study 5: The Urban Forest Community

The Urban Forestry Community brings together stakeholders from all over the world looking to promote Urban and Peri-urban Forestry and Greening. This interactive community platform provides users with the opportunity to discuss, and share knowledge and learn about good practices related to optimizing the role of trees and forests in and around cities to alleviate poverty.

This interactive online community aims to facilitate a wide and open network to reinforce dynamics among sectors, disciplines and institutions concerned. It supports an open dialogue, and exchange of information and expertise to reach an optimum integration of trees and forests in and around the cities of today and tomorrow.

All stakeholders concerned with the benefits of trees in urban development are invited to participate in support of good governance, public participation, decentralized decision-making processes, and implementation of good practices adapted to the local conditions. Mayors and city managers, foresters, landscape architects, scientists and universities, groups of interest and private enterprise are among the stakeholders invited to join the community.

More information: http://km.fao.org/urbanforestry/ email urban-forestry@fao.org

Case Study 6: Fishery Resources Monitoring System Partnership

The Fishery Resources Monitoring System (FIRMS) Partnership was launched in February 2004 and currently brings together 13 international organizations sharing an interest in an "information backbone" of the inventory of stocks and fisheries. FIRMS's objective is to provide information users with a better means to monitor the status and trends of world fishery resources and their management, based on authoritative information sources. Being a formal arrangement, partners make commitments for the provision of information and the governance of the system, and discuss information-sharing mechanisms. Discussions include conditions under which the information is shared: quality assurance issues, data ownership, dissemination rules, information standards and streamlined workflow mechanisms.

FIRMS is powered by the Fisheries Global Information System and benefits from its content management system and information exchange protocol features. Information provided by partners through streamlined protocols is published on the Web for general access. FIRMS provides partners with the appropriate tools and training to ensure controlled dissemination of high-quality and updated information.

Communication within the community occurs primarily through emails, and steps have been taken to communicate through Wikis. Communication to outside stakeholders takes place through various forums (UN General Assembly, APEC working groups, EU lunch Conferences, Regional Fishery Bodies meetings, etc.). Brochures are available in three languages. Search robots for crawling engines and a Wiki page about FIRMS have been set up to increase Web visibility.

More information: http://firms.fao.org/firms email FIRMS-secretariat@fao.org

Case Study 7: The Integrated Food Security Phase Classification

As long as major humanitarian organizations, UN agencies and national governments use different scales for classifying food security emergencies, there will be confusion about which situations are most severe, and developing crises may be overlooked. With so many crises all over the world, it is almost impossible to understand which ones are most critical and where to intervene first, especially when resources are limited. In response, major humanitarian players have finally come together to adopt the Integrated Food Security Phase Classification (IPC) as a common scale for classifying food security emergencies.

The IPC is not just a scale – it is a process in which representatives from all the main food security-related organizations, including national governments, literally sit together to reach consensus on the current and evolving food security situation. In many countries, this provides a unique opportunity for everyone to work together and compare the information that is available, and naturally leads to more coordinated response efforts. The IPC process takes place on three levels – national, regional and global.

The technical development kicked off with the one-month IPC Global Forum – an online discussion group where 175 experts from organizations and universities all over the world came together to discuss how to improve the IPC. The forum led to a three-day face-to-face decision-making meeting in Rome. Meeting participants confirmed the fact that by clearing up technical issues online, it was possible to delve into the more delicate second phase of decision making during the face-to-face meeting. Both the forum and the meeting were deemed a success and led to additional donor funding.

More information: www.ipcinfo.org email denise.melvin@fao.org, zoe.druilhe@fao.org

Case Study 8: E-learning to Support Knowledge Sharing

A wide range of e-learning resources have been developed as part of the *Information Management Resource Kit* (IMARK) to support information and knowledge sharing. A series of online workshops have been developed to support the Rome-based agencies in developing thematic knowledge networks based on IMARK materials. These e-learning materials cover topics including: knowledge sharing, information management, collaborative learning, managing and facilitating communities. Workshop resources include self-paced e-learning, online discussions, tool tours, podcasts, synchronous "live" sessions using different online conferencing tools, and Wikis.

More information: http://www.imarkgroup.org email: andrew.nadeau@fao.org

Case Study 9: Plant Production and Protection Division (AGP): One Global AGP

The OneAGP collaborative workspace was created to improve communication and collaboration between the international interdisciplinary teams and thus increase the efficiency in the delivery of AGP's services and products. It was conceived as a virtual workspace, in which AGP staff members and collaborators who are engaged in aspects of plant production and protection are part of a network of readily available information, expertise and experience in those fields. The OneAGP workspace brings together colleagues in regional and/or subregional offices, field projects and headquarters who are willing to provide the right kind of information, expertise or experience.

An initial AGP divisional consultation entitled 'One Global AGP' was held in January 2008 with a follow-up one year later. The follow-up session addressed, among other items, the questions of how to capture information and knowledge as they arrive or are created; how to retain their accumulated aggregate, which together with the minds of One Global AGP members constitutes institutional memory; and how to make and keep information and

knowledge readily available and distribute as needed, internally and to external collaborators as well as clients. Groups were formed to discuss and explore possible practical, time-efficient options as well as improvements to existing facilities to be explored or tried out.

Lessons learned include: (a) a renewed commitment to more systematic communication between decentralized offices and headquarters, e.g. through the OneAGP collaborative workspace, with less complex access to information for every member, and access made less time-consuming for non-headquarters users; (b) the need to address information overload; (c) the need for communication and information distribution, both internal and external, to be results-based; and (d) an increasingly collaborative approach to knowledge production, such as providing technical information and issue notes in response to frequently asked questions or requests for advice, which should then be kept readily available for re-use.

More information: http://oneagp.fao.org email: wolfgang.prante@fao.org

ANNEX 5: REFERENCES AND RESOURCES

Strategy Working Papers

A review of FAO's Thematic Knowledge Networks and eight other Working Papers was conducted during the development of the Information and Knowledge Strategy in three phases. A first phase, which took place from September 2008 through the end of January 2009, focused on background surveys and culminated in the Strategic Framework and Principles:

- 1. Report of the Review of the Pilot Phase of FAO Thematic Knowledge Networks, KCE (May 2008)
- 2. Working Paper 1: Review of Member States and Other Guidance related to Information and Knowledge, KCE (December 2008)
- 3. Working Paper 2:Review of Knowledge Management Strategies of Other Development Organizations, KCE (December 2008)
- 4. Working Paper 3: Issues Related to Information and Knowledge as an FAO Core Function in FAO's Programme Management, KCE (October 2008)
- 5. Working Paper 4: FAO Information and Knowledge Strategy Framework and Principles, KCE (January 2009)

The second phase, which took place from February through June 2009, involved consultations to assess strengths and weaknesses in both delivering information and knowledge services and using knowledge sharing to improve performance.

- 6. Working Paper 5: How Information and Knowledge Add Value through FAO's Programmes and Partnerships, KCE (June 2009)
- 7. Working Paper 6: Continuous Improvement through Knowledge Sharing and Learning, KCE (June 2009)
- 8. Working Paper 7: Finding the Synergies between People, Processes and Technology, KCE (July 2009)
- 9. Working Paper 8: Roadmap for Implementation, KCE (June 2009)

All Working Papers are available on the *Knowledge Café* Web site on the FAO intranet at http://intouch.fao.org/ks/ks_blog/?no_cache=1&tx_wecdiscussion%5Bsingle%5D=493.

Member State and Other Guidance Documentation

- 10. FAO: The Challenge of Renewal: Report of the Independent External Evaluation of the Food and Agriculture Organization of the United Nations (2007) ftp://ftp.fao.org/docrep/fao/meeting/012/k0827e02.pdf
- 11. Chair's Aide Mémoire Third Meeting of CoC-IEE Working Group I (February 2008) www.fao.org/uploads/media/11febaide%20mémoirewg1.pdf
- 12. Chair's Aide Mémoire Tenth Meeting of CoC-IEE Working Group I (April 2008) (includes Strategy Outline for Knowledge Management as Annex 30) http://www.fao.org/uploads/media/aide%20memoire%20wg%201%2021april.pdf
- 13. FAO Strategic Framework 2010-19, Conference Document C2009/3 (November 2009) http://www.fao.org/uploads/media/C2009K5864EnglishStrategicFr_1.pdf
- 14. FAO Root and Branch Review, Final Report (April 2009)
 http://www.fao.org/uploads/media/FAO RBR FinalDeliverable v1 1.pdf

- 15. Report of the 35th Session of the FAO Conference, Conference Document C 2008/REP (November 2008) ttp://ftp.fao.org/docrep/fao/meeting/014/k3413e.pdf
- 16. Knowledge Management Profile: Review of Knowledge Forum (2007) http://intranet.fao.org/dwspicker/84782 en fao km profile.pdf
- 17. Permanent Representatives Seminar on Knowledge Exchange and Capacity Building (January 2008) http://intranet.fao.org/intranetstatic/root/12586/83387/78715/91126/
- 18. Reform Proposals Approved by the FAO Governing Bodies (2007) http://intranet.fao.org/dwspicker/78725 en fko odg memo.tif
- 19. Director-General's Bulletin "FAO as a Knowledge Organization" (2006) http://intranet.fao.org/internal/ois/afiintranet/dgb/dgb06_35.htm
- 20. JIU/REP/2006/6 Results-Based Management in the United Nations in the Context of the Reform Process (2006)

 HTTP://DOCUMENTS-DDS-ny.un.org/doc/undoc/gen/g06/024/54/pdf/g0602454.pdf
- 21. JIU/REP/2007/6 Knowledge Management in the United Nations System (2007) http://documents-dds-ny.un.org/doc/undoc/gen/g07/019/90/pdf/g0701990.pdf
- 22. General Assembly Resolution: 59/250. Triennial comprehensive policy review of operational activities for development of the United Nations system (2007) http://documents-dds-ny.un.org/doc/undoc/gen/n07/457/79/pdf/n0745779.pd f

Other FAO Resources

- 23. FAO's Communications Policy and Strategy, Document X1200/E (2000) http://www.fao.org/docrep/X1200E/x1200e00.HTM
- 24. FAO Publishing Policy (March 2008) http://intranet.fao.org/dwspicker/93176_en_FAOPolicyE.pdf
- 25. Summary of Currently Supported Information and Knowledge Sharing Activities, KCE,
- 26. Knowledge Management Framework and Roadmap: Strategic Approaches to Leverage FAO as a Knowledge Organization, L. Lamoureux (July 2007)
- 27. Knowledge Management Road Map: Supporting Document, I. Wooler (July 2007)

Knowledge Management Strategies of Other Development Organizations

- 28. World Health Organization (WHO) Knowledge Management Strategy (2005) http://www.who.int/kms/about/strategy/en/index.html and http://www.who.int/kms/about/strategy/kms_strategy.pdf
- 29. Pan American Health Organization (PAHO) Information and Knowledge Sharing: Report of Task Force No. 4 (2006)
- 30. Web Site of UNESCO's Knowledge Management Services http://www.unesco.org/en/education/knowledge-management-services/
- 31. International Labour Organization (ILO) Governing Body Document GB.300/PFA/9/2 Results-based management: (b) Knowledge strategy (November 2007) http://www.ilo.org/public/libdoc/ilo/GB/300/GB.300 PFA 9 2 engl.pdf

- 32. UNESCAP UNDP Knowledge Management Workshop Report (March 2005) http://www.unescap.org/oes/km/undp/final_report.pdf
- 33. International Fund for Agricultural Development (IFAD) Document EB 2007/90/R.4: IFAD Strategy for Knowledge Management (April 2007) http://www.ifad.org/gbdocs/eb/90/e/EB-2007-90-R-4.pdfm
- 34. World Bank Institute, Web Site on Knowledge Exchange http://wbi.worldbank.org/wbi/about/approaches/knowledge-exchange
- 35. USAID Web Site on Knowledge Management http://www.usaid.gov/km/
- 36. Evaluation of Knowledge Management and Institutional Learning in SDC, Evaluation + Controlling Division of the Swiss Agency for Development and Cooperation (April 2009) http://www.deza.admin.ch/de/Home/Aktivitaeten/Evaluation/Abgeschlossene_Evaluationen/ressources/resource_en_178861.pdf
- 37. GTZ Web Site on Knowledge Management http://www.gtz.de/en/themen/uebergreifende-themen/8339.htm
- 38. Knowledge for Development, Comparing British, Japanese, Swedish and World Bank Aid, Kenneth King and Simon McGrath (2003)

 http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/2889773BC

 CFD932D85256DC00055B9DE/\$file/development_agencies.pdf
- 39. Knowledge Perspectives in JICA, Keichi Kato, former Director of the JICA Institute for International Cooperation (IFIC) http://www.norrag.org/db read article.php?id=756

Concepts and Good Practices in Knowledge Management

- 40. Learning to Fly, C. Collison and G. Parcell, Capstone Publishing (2004)
- 41. Harvard Business Review on Knowledge Management, HBR Paperbacks (1998)
- 42. Knowledge Management: A State of the Art Guide, P. Gamble and J. Blackwell, Kogan Page Limited (2001)
- 43. Working Knowledge: How Organizations Manage What They Know, T. Davenport and L. Prusak, Harvard Business School Press (1998)
- 44. Knowledge Unplugged, J. Kluge, W. Stein, T. Licht, McKinsey and Company (2001)
- 45. *The Social Life of Information*, J. S. Brown and P. Duguid, Harvard Business School Press (2000)
- 46. Slack: Getting Past Burnout, Busywork, and the Myth of Total Efficiency, T. DeMarco, Broadway Books (2002)
- 47. Presence: Human Purpose and the Field of the Future, P. Senge, O. Scharmer, J. Jaworski and B. S. Flowers, Doubleday (2004)
- 48. Change Management Learning Center, http://www.change-management.com/