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#### **IFAD**

# INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT Executive Board – Sixty-Seventh Session

Rome, 8-9 September 1999

## PROGRESS REPORT ON MANAGEMENT INFORMATION SYSTEMS

#### I. INTRODUCTION

- 1. The objective of the present document is to inform the Executive Board of the current status of IFAD's corporate information system (IS) and provide an overview of the medium-term operational outlook.
- 2. The following background section links this document to the Progress Report on Management Information Systems (EB 97/60/R.28) presented to the Executive Board in April 1997. Section III provides information on IS development activities for the period 1997–99 and introduces a number of activities not included in the 1997 plans. Section IV provides a mid-term view of the main activities foreseen for the year 2000 and beyond, together with relevant recommendations.

#### II. BACKGROUND

- 3. Document EB 97/60/R.28 provided an overview of the status of IFAD's IS as of early 1997 and introduced a process-based model of IS support which evolved from the traditional, functional view of the Fund's management information system (MIS). A cross-functional approach has been applied to all major initiatives throughout the period 1997-99. That approach led to the creation of the Information Management Committee which is responsible for the governance and direction of IS development initiatives.
- 4. Since 1997, efforts have focused on improving and expanding the coverage of IS support in the areas of finance, documents management, member relations, loans and grants, portfolio management and, to a much lesser degree, human resources management and investments.
- 5. From the technological standpoint, the past two years have confirmed the validity of Webbased systems and object-oriented tools and witnessed the widespread use of corporate "intranets" as more effective information delivery mechanisms. IFAD has taken steps to reorganize its core group of IS development resources along object-oriented capabilities and Internet-based technologies.



## III. FOLLOW-UP OF 1997 PLANS

- 6. A review of the purchasing, accounts payable and budget monitoring and control processes concluded that IFAD's needs could best be met through implementing the PeopleSoft public sector software suite that had not been available on the market when IFAD first selected PeopleSoft. A strategy for sequencing the various modules was included in the private sector version of the accounts payable module in order that IFAD would reap a number of tangible intermediate benefits. Work on the customization and implementation of the accounts payable module was initiated in September 1997 and completed in March 1998, and has already resulted in more rapid payments to IFAD's vendors. In May 1998, IFAD obtained the public sector versions of the purchasing, accounts payable and general ledger modules at no additional cost to the organization.
- 7. Implementation of the public sector version of PeopleSoft is expected to follow a phased approach, starting with the accounts payable and basic general ledger functions in October 1999. The loading of year 2000 budgets is planned for December 1999, and the activation of the purchasing and the current functionality of budget monitoring and control, as well as associated processes, will take place in January 2000.
- 8. In the area of documents management, a detailed definition of user requirements was completed in September 1997. In January 1998, the Documents Management System (DMS), based on the commercial software "DocsOpen", was released to pilot units in the Management and Personnel Services Department (MD) for testing purposes. The system was released to pilot units in the Programme Management Department (PD) in October 1998 and subsequently extended to all IFAD divisions in May 1999.
- 9. With a view to addressing the specific needs of the Documents Centre, a Records Management System (RMS), based on the commercial software "ForeMost", was selected in 1998. A detailed definition of user requirements was completed in September 1998 and a customized version of the system was released to the Documents Centre on a pilot basis in December 1998. The system became operational in April 1999.
- 10. In the area of member relations (MR) and contacts management, a specific MR module in the Contact Information Available On-line System (CIAO) was implemented in September 1997. In order to cater to work flow-related user needs, CIAO's data export and reporting facilities were redesigned in August 1998 and the conference registration functionality was extended to cover non-official meetings in January 1999.
- 11. In the area of loans and grants, several maintenance interventions and a number of functional enhancements have been applied to the Loans and Grants System (LGS). The most important maintenance activities include implementation of a "partial refunds with different value dates" function in May 1998; installation of the "undo" function to reverse incorrect postings in August 1998; and the inclusion of a "synchronization" window to deal with rounding-up problems and synchronize transactions in January 1999. The most important functional enhancements to LGS include implementation of variable interest rates in June 1997; automatic conversion for Euro currencies in February 1999; and, in June 1999, the "draft mode" recording for loans and grants. Further enhancements to cater for arrangements under the Heavily-Indebted Poor Countries (HIPC) Debt Initiative are scheduled for September–December 1999.

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- 12. In the area of project portfolio management, in March 1998, the reporting capacity of the Project Portfolio Management System (PPMS) was supplemented with ad hoc query and reporting facilities. In addition, a number of functional enhancements have been applied to PPMS including, in November 1998, the generation of the Project Status Report (PSR) for portfolio review meetings and, in July 1999, implementation of the project development chart to help monitor project processing with respect to Executive Board presentation.
- 13. In the area of human resources management, two important activities not included in the 1997 plan have been undertaken. First, IFAD's personnel/payroll system, which is a mainframe application currently operated at the Computer Centre of the Food and Agriculture Organization of the United Nations (FAO), has been migrated to a year 2000 compliant version of the operating platform (Millennium 3/COBOL OS/390). The migration exercise was started in October 1998 and completed in April 1999. Secondly, user requirements with respect to the leave tracking process were identified and analysed in the first half of 1999. A Leave Record Tracking System (LRTS) was designed, implemented and deployed on a pilot basis in July 1999 and a second release is scheduled for deployment in September 1999.
- 14. In the area of investments, the SWIFT Alliance software was implemented in March 1998 to facilitate the processing of Treasury Division's banking transactions.
- 15. The following table gives a summary of progress regarding IS development projects during the period April 1997–September 1999.
- 16. A major area of activity that was not specifically planned for in 1997 was the migration programme initiated in 1998 and completed in 1999 to upgrade the software platform to Windows NT and the corresponding applications to 32-bit software. The programme has been extended to include the upgrading of the corporate database platform to match the requirements of the upgraded software. These activities have been funded through yearly allocations in the regular budget.
- 17. As well as the above-mentioned system and infrastructure development activities, renewed emphasis has been placed on information security. Owing to the organization's growing reliance on information technology, one existing staff position has been converted into a full-time Information Technology Security Officer post to ensure that the Fund's information assets are adequately protected and that critical information systems are available under all circumstances. In addition, as in many other organizations, the advent of the year 2000 has required that IFAD review its information systems to ensure a smooth transition to the new millennium. Details on IFAD's Year 2000 Compliance Programme were presented to the Executive Board at its Sixty-Fifth Session (EB 98/65/INF.2) and further status reports will be provided in December 1999 and April 2000.

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## **Progress to Date and Current Status of IS Development (1997-1999)**

SYSTEM	STATUS	PROGRESS TO DATE
GL (public sector)	Implementation	Implementation to be completed in October 1999
Accounts Payable (private sector)	Operational	Implementation completed in March 1998
Accounts Payable (public sector)	Implementation	Implementation to be completed in October 1999
Purchasing/Budget	Implementation	Implementation to be completed in January 2000
DMS	Operational	Definition of user requirements completed in September 1997 Released to pilot units (MD) in January 1998 Released to pilot units (PD) in October 1998 Released to all IFAD divisions in May 1999
RMS	Operational	Definition of user requirements completed in September 1998 Released to Documents Centre in April 1999
CIAO	Operational	Implementation of MR module in September 1997 Redesign of export/report facility in August 1998 Coverage of non-official meetings in January 1999
LGS	Operational	Enhancement: variable interest rate, June 1997 Maintenance: partial refund, May 1998 Maintenance: partial "undo" function, August 1998 Maintenance: administration, January 1999 Enhancement: Euro conversion into basket currencies, February 1999 Enhancement: "Draft Mode", June 1999 Enhancement: HIPC, scheduled for December 1999
PPMS	Operational	Ad hoc query and reporting, March 1998 Project Status Report, November 1998 Project Development Chart, July 1999
Personnel/Payroll	Operational	Upgraded to "Y2K Compliance" in April 1999
LRTS	Implementation	First release deployed on a pilot basis in July 1999 Second release scheduled for September 1999
Investments	Operational	Implementation of SWIFT Alliance, March 1998

## IV. NEAR AND MID-TERM OUTLOOK

## Main IS Development Activities Anticipated for 2000 and Beyond

18. The list of candidate processes for support through IS development activities, presented in document EB 97/60/R.28, has been refined and expanded following an internal needs assessment exercise involving the offices of the President and the Vice President, the Economic Policy and Resource Strategy Department, MD and PD. The processes in the expanded list have been grouped into 15 process clusters, as illustrated in the annex.

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- 19. The process clusters provide the basis for the development of IFAD's integrated business model during the course of a high-level study on IS development, planned to commence in October 1999 for completion in early 2000. The study is also expected to provide a cost-benefits analysis and a priority schedule for a two-to-three-year IS development programme to be funded through capital budgeting starting in 2000.
- 20. Pending the results of the high-level study and on the basis of processes and requirements identified thus far, a number of IS development initiatives are expected to be undertaken as of 2000. On a preliminary basis, the expressed corporate priorities for development include human resources management, resource mobilization, contributions management, loans and grants, and knowledge management.
- 21. With the exception of the leave tracking system, the present coverage of the human resources management area is limited to providing computerized support to processes that feed the payroll process. However, both that support and the payroll system are based on obsolete technology and tools and costly outsourced mainframe services. As a result, neither system can be enhanced to keep abreast of changes in the business processes in a cost-effective manner. In order to rectify that situation and address the various needs of the human resources management area, activities relating to requirements analysis, design and implementation are expected to be initiated in 2000, either within the framework of the PeopleSoft suite of commercial software packages, human resource Module, or as a series of specific applications developed inhouse with the help of outside consultants.
- 22. Resource mobilization is an area that traditionally has relied solely on end-user productivity tools and has not been integrated with other mainstream IFAD information systems. Starting with a new module focusing on donor profiles, which is currently at a design stage, the development of a data/information management facility is expected to start during the second half of 2000.
- 23. At the present time, no direct computerized support is available for contributions management. A Member contributions system developed in the early 1990s was discontinued due to problems with inter-divisional work flows and cross-divisional data capture and representation, and the obsolescence of the technical platform with which it had been implemented. A new Member contributions system is planned to be developed in 2001.
- 24. The loans and grants area is supported by a system (LGS) that was developed in the early 1990s but is constrained by obsolete design and lack of integration with the other the financial systems. The architecture of the system is not suited to accommodating new and changing business requirements such as the HIPC mechanism and the switch to an Euro-based repayment currency. To put these shortcomings to rights, IFAD intends to adopt the standard accounts receivable functionality in conjunction with the billing functionality, both of which form part of the PeopleSoft suite of modules. It is hoped to undertake a detailed requirements analysis in this area of activity, starting early 2000, pending approval of funding as part of the capital budgeting proposal.
- 25. Corporate interest in the area of knowledge management is shifting from finished knowledge products to knowledge generation and validation, the appropriate knowledge product being assembled or packaged by the user on demand. An important IFAD objective is to open up the knowledge-generation and validation process to all potential users inhouse (and to external users in the future). To support the knowledge-generation and validation process and other related processes such as learning, discussion forums and thematic groups, a number of web-based and Internet/intranet-based tools are planned for implementation starting in the year 2000.



#### **Technical Infrastructure**

- 26. At the present time, IFAD's corporate network infrastructure is largely the result of the natural expansion of the local area network pilot project initiated in 1991. Driven by specific operational needs, IFAD's network has since been expanded by connecting new users and devices and powered up in terms of storage capacity, response time and overall server reliability. In the meantime, several new technologies and architectures affecting the various components of the network have emerged to support the implementation of Internet/intranet Web-based, multi-tier application architectures.
- 27. As IFAD's network enters into the Internet/intranet era when network services become an integral part of the end-user application, a comprehensive assessment and renewal of the major components of the corporate network infrastructure is urgently required. This renewal is essential to ensure the efficiency and functionality required to support the corporate applications and productivity tools to be deployed beyond the year 2000.

### V. CONCLUSIONS

- 28. The anticipated IS development activities presented in Section IV call for a relatively long-range allocation and commitment of resources at the corporate level. Following the Executive Board's approval of the capital budget concept for projects spanning more than one financial period, a proposal for capital budget funding of IFAD's IS development programme for the period 2000–02 will be presented to the Executive Board in December 1999.
- 29. The proposal will provide estimates of the major cost components of each IS development project, with time projections and preliminary prioritization. The estimates and projections will be refined and confirmed in early 2000 by the results of the above-mentioned high-level study for IS development, particularly the cost-benefits analysis and priority schedule.

ANNEX

## PROCESS CLUSTERS IDENTIFIED DURING IFAD'S PRE-FEASIBILITY NEEDS ASSESSMENT

- 1. The auditing cluster includes processes such as Obtain and Analyse Auditing Evidence, Produce Audit Reports and Track Audit Recommendations. The perceived needs in this area focus on the availability and use of a generalized data access and analysis tool, the generation of automated audit papers and an effective mechanism for information sharing.
- 2. In the area of **conference services management**, currently covered by CIAO, there is a perceived need for expanded support for storing and utilizing information regarding both official and non-official meetings.
- 3. The **contributions management** cluster includes both Member contributions and supplementary funds management. Perceived needs in this area include support for pledges, instruments of contribution, payments against replenishments with both current and historical values, and supplementary funds tracking, analysis and reporting.
- 4. In the area of evaluation, perceived needs focus on support for facilitating stakeholder involvement, for managing the relationship with the Evaluation Committee, and for planning, tracking and following up evaluation missions.
- 5. The **headquarters services management** cluster covers a variety of support services provided to the various functions and to staff, including inventory management. Perceived needs in this area focus on a service request tracking mechanism and on integration of the current stand-alone inventory system with the relevant corporate processes.
- 6. The **human resources management** cluster includes, among other processes, recruitment, contract management, entitlements administration, staffing and payroll. Perceived needs focus on support for work flow automation, access to personnel policies and procedures, vacancy announcements, anticipated openings, job descriptions, entitlements, performance tracking, request tracking, training and staff development. Regarding payroll, specific needs include support for Eurobased salaries and new types of contracts as well as integration with the financial information system.
- 7. The **institutional memory management** cluster includes processes such as records and archives management, mailing lists and contact management, and translation. Perceived needs revolve around the electronic capture, storage and distribution of documents, integration of archiving tasks, the availability of consistent contact information across IFAD, and computer-assisted/automated translation.
- 8. In the area of **investment management**, perceived needs focus on the computerization of IFAD's "Investment Action Sheet", on support for data analysis, and on integration with the financial information system.
- 9. The **knowledge management** cluster includes the knowledge management process itself, knowledge generation, learning, legal information research, and library services management. Perceived needs in this area focus on support for thematic studies and groups, lessons learned, distant learning, access to law of countries, and library operations.
- 10. In the area of **legal framework management**, perceived needs focus on support for creating and managing legal documents, in particular the primary legal document and related legal documentation.



#### ANNEX

- 11. In the area of **payments/receipts management and bank reconciliation**, perceived needs focus on integration with loan and grant operations, on integration with the various modules of the corporate financial system, and on support for managing daily bank balances.
- 12. The programme of work management cluster includes loan and grant administration, project development, project portfolio management, grant management, budget monitoring, and nongovernmental organization (NGO) and (CSO) relationship management. In the area of loan and grant administration, currently supported by LGS, perceived needs focus on the integration of loan and grant transactions with the rest of the financial system; on support for Euro currencies; on procurement analysis; and on flexibility to accommodate changing rules and new external requirements. Regarding project development, perceived needs revolve around support for learning, technical review and mission tracking work. Regarding project portfolio management, although the envisaged second release of PPMS has not yet been defined in terms of user requirements, there is a perceived need for revisiting the design and scope of the system more than three years after the original design. Regarding grant management, there is a perceived need for tracking and reporting the various grant activities. Regarding budget monitoring, beyond support for the administrative budget, which is expected to become operational as of fiscal year 2000, there is a perceived need for support to the programme of work-related budget and for detailed staff costs. Regarding the NGO and CSO relationship management process, there is a perceived need for extracting, capturing and maintaining information for corporate and external use.
- 13. The **resource mobilization** cluster includes the resource mobilization process, partnership management, and public affairs/advocacy/communications management. Perceived needs in this area revolve around integrating heterogeneous information sources and supporting data access and data management. A donor's profile application to support access to external sources and data capture is scheduled for development during the second half of 1999.
- 14. The **strategy articulation** cluster includes both resource strategy and corporate strategy. Perceived needs in this area focus on support for research and analytical capacity and for tracking IFAD's corporate scorecard.
- 15. In the area of **travel**, perceived needs revolve around support for travel authorizations and travel expense claims, including processing of authorizations and claims related to appointment, home leave, repatriation and other personnel actions.