Client-Oriented Agricultural Research and Dissemination Project

DFID Department for International Development

NARO

Monitoring and Evaluation Series

No.1

MONITORING & EVALUATION STRATEGY

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1. RATIONALE FOR MONITORING AND EVALUATION

1.1 Operational Definition of Monitoring and Evaluation

Monitoring refers to a process undertaken to improve the management of an activity, project or programme. Monitoring activities are undertaken frequently to facilitate adjustments that improve the outcomes or impacts of a given activity, project or programme (APPs). Evaluation on the other hand aims to assess whether an activity, project or programme has achieved or contributed to the achievement of its objectives. Evaluations are undertaken periodically to inform and contribute to a better design of new APPs as opposed to monitoring which informs the operations of ongoing APPs. Operationally, evaluation is the periodic assessment of relevance, performance, efficiency and impacts of APPs against expected outputs (Anandajayasekeram and Martella 1999). Accordingly;

- **Performance evaluation or "effectiveness analysis" for example compares what APPs have achieved against the expected output e.g. before and after, with and without, and target versus achieved.**
- **Efficiency evaluation compares the costs against benefits of APPs.**
- **Relevancy refers to the appropriateness of the problem addressed and hence the APP to the target population.**
- **Impact evaluation assesses the broad effects of APP output on the target beneficiaries-the long-term effects of APP, often, this is referred to as the "people level" impact.**

The monitoring process, besides being an end in itself in so far as improving the outcomes of APPs, is also a means of generating data and information for evaluation purposes. Whilst quantitative methods for establishing objective performance and efficiency based evaluation criteria are relatively well developed, those for relevancy and impact are often subjectively determined. Evidence abounds in the literature that objective people level impact assessment requires costly monitoring process and data. However, participatory approaches and methods can be employed to establish criteria for assessing the relevancy and impact of APPs on target populations.

1.2 The COARD Project

The NARO/DFID Client Oriented Agricultural Research and Dissemination Project aims to improve rural livelihoods in North and East Uganda through innovative systems for client-led agricultural technology generation and dissemination. The project purpose is therefore to increase the use of poverty-reducing rural technologies among a wide spectrum of rural households.

At the end of the project, the following specific outputs should have been achieved:

- Capacity for client-oriented research and technology transfer strengthened within SAARI and stakeholders;
- Client-oriented technology development and dissemination approaches developed and operational in target areas;
- Client-oriented approaches, and processes for implementing agricultural technology funds promoted.

Initially, the project was designed to facilitate client oriented participatory research and extension through two competitive funds, the Client Oriented Research Fund (CORF), and the Technology Partnership Fund (TPF). These have since been merged into a single Agricultural Technology Fund (ATF). Researchers, extensionists and development agents active in E and N Uganda are eligible to apply for the funds, though it is expected that all funded projects should include SAARI and/or NARO staff. Some projects are led by SAARI staff, whilst others are led by staff from other NARO Institutes, Makerere University, Public Extension Departments or NGOs, amongst others.

Decisions on which projects should be funded are taken by a local governing committee, using published criteria agreed with stakeholders and, where necessary, comments from specialist technical reviewers. The committee comprise representatives from NARO, the Makerere University, local government extension, NGOs, Farmer Groups and the private sector.

NARO has established a new institutional unit on an experimental basis – the Client-Oriented Research Support Unit (CORSU), to administer the competitive funds, provide support and back-stopping to project implementers in client-oriented approaches and methodologies, monitor and evaluate project activities, manage skills development for the project, and assist the scaling-out of project outputs and activities.

2. APPROACH TO MONITORING & EVALUATION

The traditional approach to monitoring and evaluation involves generation of information for project planning (ex-ante evaluation), on-going evaluations for improving project performance and terminal/ impact assessment evaluations to assess the product or its impact on targeted beneficiaries. By and large, these evaluations are conducted by people external or detached from the project, often formal and structured requiring objective measures with outputs targeted at project managers, project financiers or policy makers (NARO 2001). Participatory Monitoring and Evaluation (PM&E), as opposed to the traditional M& E, is a democratic process for examining the values, progress, constraints and achievements of projects by stakeholders. It recognises values and contributions of all stakeholders including and in the case of agricultural technologies local people (farmers) and empowers them to become involved and contribute to the process.

The NARO/DFID project specifically addresses client-oriented and participatory approaches to research and technology support. Accordingly, emphasis should be placed on the participatory aspects of monitoring and evaluation as well as tools that assist project participants in joint learning and decision-making.

2.1 Purpose

This framework outlines an approach for a monitoring & evaluation programme for the NARO/DFID COARD project, consistent with the particular objectives of the project and with the existing monitoring and evaluation programme of the implementing agency, NARO, based on discussions held throughout the project with potential implementing stakeholders, and the proceedings of a meeting held with the NAROSEC Monitoring & Evaluation Unit, representatives of government and non-government extension, and senior SAARI staff (April 2000).

The objectives of the M&E framework for the COARD project are to:

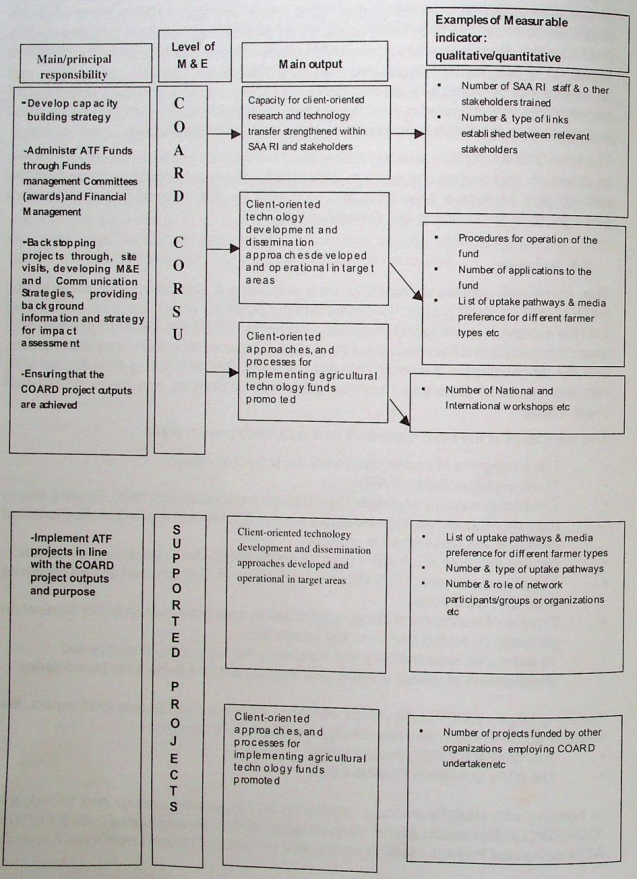
- Track progress of implementation of the project strategy;
- Track implementation of ATFs;
- Enhancing capacity of stakeholders (researchers, extension, NGO, farmers, etc) to plan, monitor, and manage the efficient use of resources to implement client-oriented research and dissemination projects;
- Assess extent to which ATFs projects contribute towards overall project outputs;
- Assess extent to which COARD project outputs are being achieved and will contribute towards the purpose;
- Draw-out lessons learnt at regular intervals to contribute towards policy formulation guidance by NARO and other key stakeholders;
- To determine systematically and objectively the relevance, efficiency and effectiveness of project activities and their impact on the intended beneficiaries;

Focusing largely on the performance, efficiency, relevance and people level impact, the strategy document identifies two activity levels for M &E namely:

- The COARD/CORSU Project Level;
- The ATFs or Funded Projects Level.

In keeping with NARO's planning, monitoring and evaluation strategy and format, the "COARD/CORSU Project Level" is comparable to NARO's "Strategic Level", whilst the""The ATFs or Funded Projects Level" is comparable to NARO's "Tactical Level" (see Annex 1).

Figure1: A Framework for Monitoring & Evaluation in the NARO/DFID Client-Oriented Agricultural Research and Dissemination Project



2.2 Monitoring and Evaluation at the COARD/CORSU Level

As indicated above COARD/CORSU provides the strategic guidance to all supported projects. Overall management of the ATFs (funds operational management), co-ordination of capacity building activities and backstopping supported projects are thus the responsibility of CORSU. Monitoring at this level should assess the extent to which the COARD project has achieved or contributed towards achieving the three stated outputs while keeping the overall purpose of the project in perspective. To the extent possible, M&E activities at this level should feed into NARO's overall M&E strategy thereby providing information to assist NARO on research management. In addition, through quarterly report summaries and project visits, CORSU will be able to track project implementation and progress of supported projects.

In addition, COARD/CORSU coordinates the generation of background information needed by supported projects to articulate client needs. These include needs assessment studies, information on the agricultural knowledge systems of E & N Uganda, marketing studies, and information on beneficiary status and behaviour for impact assessment. Participatory needs assessments were carried out by SAARI in the Teso and Northern farming systems in 1998 and 1999(Akwang'*et al,* 1998; Akwang *et al,* 1999), providing a useful starting point for the first round of proposal review and awards. The need for reviewing and updating them during the year 2002 is being considered.

2.2.1 *Baseline data and impact assessment*

The monitoring & evaluation framework should provide sufficient baseline data to ensure that *ex-post* impact assessments can be easily carried out after the project has ended. Given the nature of information required to assess the overall impact of the project at farm level, COARD/CORSU needs to establish the background/context and the benchmarks for household level impact assessment.

Specifically, COARD/CORSU is to develop a strategy for household level impact assessment to be implemented by individual projects. A survey instrument is being developed by the COARD M&E team to capture information on household livelihood strategies and farm production parameters, in discussion with project implementers. It is envisaged that specific projects will address specific areas of technology or policy based intervention strategies to improve the livelihoods of rural households.

The data captured in the instrument will cover a wide range of commodities/factors, directly relevant to the projects. However, additional information necessary for household level impact assessment, some of which may not be of immediate relevance to particular projects will be collected as well. The baseline survey will be conducted among approximately 500 randomly selected households in Teso and Lango regions. To the extent possible, the survey instrument should remain generic enough for additional details deemed relevant to specific project activities by the project implementers. In addition, a study will be commissioned to collect available secondary data suitable for impact analysis in Teso and Lango.

2.2.2 *Capacity for client-oriented research and technology transfer strengthened within SAARI and stakeholders*

Capacity is the ability of individuals and organizations or organizational units to perform functions effectively, efficiently and sustainably (UNDP 1998). Morgan (1997) defines capacity development as the growth of formal organizational relationships and abilities.

These entail changes in organisational behaviour, values, skills and relationships that lead to improved abilities of individuals, groups and organizations to carry out functions and achieve the desired outcomes over time.

The COARD Project has developed a series of short training courses on various aspects of participatory and client-oriented research, together with specialists from MUK. The courses are based on participatory needs assessments carried out with SAARI staff and stakeholders in June 2000. The courses are particularly intended to increase capacity at SAARI for participatory & client-oriented research, but in keeping with the partnership nature of the project, stakeholders from partner organisations are also invited to attend. Approximately 30% of trainees should be from partner organisations. Project implementers should be able to develop their skills through these various training exercises, and through implementation of their client-oriented projects with farmers and end-users.

What to monitor (indicators)

- At least 20 SAARI staff trained in procedures for on-farm, client-oriented research by End-of-Year 3;
- Number of SAARI scientists and other stakeholders attending short courses (in-country and overseas training) on client oriented approaches;
- At least 30 stakeholders (supported projects' implementers and other non SAARI/ NARO staff) trained in procedures for client-oriented approaches to technology transfer by End-of-Year 3;
- Number of SAARI and other NARO scientists sponsored for formal degree training;

How to monitor (Tools)

- Training workshop reports;
- Training workshop evaluation reports;
- Reports of ex-post evaluations of use of new skills in the workplace;
- Output to Purpose Reviews;
- Activity to Output Reviews
- Training materials made available

2.2.3 *Client-oriented technology development and dissemination approaches developed and operational in target areas*

Tanzania's Department of Research and Development and the Netherlands' Royal Tropical Institute define Client Oriented Agricultural Research as "a management approach to sustain agricultural research and increase its efficiency and contribution to the development of the Agricultural Sector". Instructively, it is noted that, the approach enhances"**stakeholders' participation in:**

- Identification of problems;
- Co-funding of research to solve problems;
- Assessment of output and impact;
- Dissemination of recommendations amongst farmers.

For the purposes of monitoring and evaluation, Client-oriented Technology Development and Dissemination can be defined as an inclusive process whereby agricultural technology

generation and dissemination responds effectively and efficiently to a wide spectrum of its client base. Inherently, the process has to devise effective mechanisms by which clients can articulate their needs in addition to an equally effective response mechanism.

Accordingly, output 2 specifically addresses how rural technologies (productivity enhancing agricultural technologies in this case) can be developed and delivered to rural households and how farmers' needs are incorporated into the process. In order to enhance the efficiency and effectiveness of the process, the comparative advantage of different actors in the technology generation and dissemination continuum, including farmers should be harnessed. Thus, at COARD/CORSU level, fostering partnerships among service providers to respond to client demand for agricultural technologies and related services is critical. COARD/ CORSU will aim to develop functional partnerships between public sector extension services, NARO scientists, development NGOs, private sector service providers and farmer organizations. Towards this end, the Agricultural Technology Fund is designed to foster partnerships between research organizations, pubic sector agricultural extension services, NGOs focusing on improving rural livelihoods, rural based private enterprises and the farming community.

The operational design and management of the funds is particularly critical to NARO's research management strategy. The financial monitoring system and its impact on project activities is one of the indicators (Annex 2).

What to Monitor(Indicators)

- Client oriented Research Fund established by End-of-Year 1.
- At least 10 research projects approved by ATFs Management Committee by End-of-Year 2 and 20 by End-of-Year 4.
- Communication strategy developed by the end of year 1, and an effective communications program in use by the end of year 2.
- At least 5 transfer mechanisms tested by End-of-Project.
- Related information made available to uptake pathways for at least 7 major crops or livestock enterprises by End-of-Project.

How to monitor and Evaluate (Tools)

- Output to Purpose Reviews;
- Activity to Output Reviews;
- Quarterly Reports;
- ATFs Management Committee Reports;
- Special studies reports (*e.g.* marketing and enterprise development study and AKIS study).

2.2.4 *Client-oriented approaches, and processes for implementing agricultural technology funds promoted.*

Supporting technology development and dissemination through the ATFs is an attempt to set-up an innovative client-oriented approach. Being competitive enhances the efficiency of the process, and the requirement for partnerships and farmer participation ensures effective involvement of all stakeholders. It is the responsibility of COARD/CORSU to facilitate the scaling-up of this approach. The COARD Project Communication Strategy is designed to help the project and supported projects to document client-oriented procedures

and results, and promote these to regional and national stakeholders. By the same token, the process and management of competitive Agricultural Technology Funds will be promoted.

How to monitor and Evaluate (Tools)

- Output to Purpose Reviews
- Activity to Output Reviews
- COARD Project publications (bulletins, flyers, papers, workshop reports, contributions to other workshops and meetings)
- Information materials (print & other media) for farmers developed by ATF-supported projects;
- ATF-supported projects publications and contributions to other workshops and meetings

2.3 Monitoring and Evaluation at the ATFs Supported Projects Level

It is the activities carried out by the individually funded projects that will have a direct impact on farm households. Each supported project therefore develops its own LogFrame with specific outputs and activities- a micro-level reflection of he COARD project outputs. At the "Supported Projects Level" therefore, activities include:

- Technology development and validation with other intermediate users
- Technology development and validation with end-users (farmers)
- Dissemination activities with other intermediate users
- Promotion of uptake with intermediate users and farmers etc.

Participatory monitoring and evaluation (PM&E) approaches are particularly relevant at this level. PM&E is defined as a systematic approach for involving local people in monitoring and evaluating changes in the natural and social environment, which affect them directly. Local people informally assess changes in their environment and monitor and analyse benefits from changing farming practices, exploring new livelihood options, and so on, as part of their daily lives.

Like other participatory research approaches, participatory monitoring and evaluation is used to describe very different levels of community participation and control over the process. Participation in evaluation spans a gradient from complete community-controlled monitoring of environmental change, to researchers consulting communities about the results of interventions

Impact at this level includes attainment of Objectively Verifiable Indicators, endorsement of new technologies participating farmers, changes in the behaviour/ status of participating farmers, and contribution to COARD/CORSU Level Objectively Verifiable Indicators.

2.3.1 *Capacity for client-oriented research and technology transfer strengthened within SAARI and stakeholders*

The first output (capacity for client-oriented research and technology transfer strengthened within SAARI and stakeholders) is largely a COARD/CORSU level activity and will be monitored in conjunction with the second output.

2.3.2 *Client-oriented technology development and dissemination approaches developed and operational in target areas*

As indicated earlier, the supported projects will involve farmers in technology generation and dissemination to enhance uptake among end-users. Monitoring at this level will involve assessing individual project implementers' ability to involve farmers in technology generation and dissemination or monitoring and evaluation of participatory research and dissemination. It also involves monitoring and evaluation of the process and results of participatory research projects. Monitoring and evaluating participatory research is different from participatory monitoring and evaluation, although will likely involve participatory monitoring and evaluation in addition to other types of evaluation approaches.

What to Monitor and Evaluate

- Effective farmer research related networks established and functioning by End-of-Year 1.
- Appropriate technologies for at least 7 major crops or livestock enterprises developed with and endorsed by farmers by End-of-Project.
- Related information is made available to uptake pathways for at least 7 major crops or livestock enterprises by End-of-Project.
- At least 5 transfer mechanisms validated by End-of-Project.
- The impact of individual projects on participating farmers.

How to Monitor and Evaluate

A common tool employed in participatory monitoring and evaluation is the planning worksheet derived from individual projects, which is used to assist the team to identify and organize the key information needed in the M&E plan.

The project LogFrame helps stakeholders generate consensus on project objectives and especially higher-level results. In a participatory manner, stakeholders (especially project implementers and farmers) define indicators that are practical and important. The details of who will participate in each stage of PME, how information will be used to improve the project and how lessons will be shared are agreed upon by consensus and recorded. When some of the stakeholders (farmers) are illiterate or semi-literate, the worksheets are used loosely as a conceptual framework with symbols and pictures substituted for the written word. This approach draws heavily on Participatory Rural Appraisal (PRA) or Participatory Learning and Action (PLA).

Both informal and participatory, and individual household interviews will be employed to generate data and information for assessing the impact of the supported projects at households level i.e. changes on beneficiary status. Each project will conduct a baseline survey to establish the existing farming practices in the project area. This data will be complemented with information collected at CORSU Level from special studies such as the needs assessment, marketing and enterprise development study, secondary data collection and various PRA's conducted in the area. As indicated above, participating farmers and project implementers will agree on qualitative and quantitative indicators of impact at household and community level. These sets of information will form the benchmarks for measuring the impacts of different projects. Periodically as agreed upon by the stakeholders, information and data that will be collected and any changes in farming practices recorded. At the end of each project, the stakeholders, based on the indicators established earlier on, shall conduct an impact assessment. During project implementation, the supported project teams shall prepare Project Quarterly Reports and Project Annual Reports. These will serve as important monitoring tools for the individual projects and COARD/ CORSU.

3 ACHIEVEMENTS AND THE WAY FORWARD

3.1 Progress

Monitoring and evaluation has been ongoing in the COARD project since the inception phase. An ex-ante evaluation of the possible social, economic and environmental impact forms an annex of the Project's Terms of Reference and Scope of Work. The COARD project has engaged two M & E officers on a full-time basis to enhance the monitoring process. Under the guidance of the TA socio-economics and the CORSU team, the M&E activities so far have focused on backstopping the supported projects. The Supported Projects are visited regularly to verify activities and outputs. Specifically, periodic review of the Log frames with implementers in addition to designing participatory technology evaluation approaches with end-users are undertaken during the field visits. Synthesis of Quarterly and Annual reports from the supported projects also form an important part of the M&E process. In June 2002, the first ATFs Annual Workshop was held in Mbale where project implementers presented progress on their activities.

3.2 Baseline data for Impact Assessment

The COARD Project design is based on needs assessment of Teso and Lango districts in addition to various studies and PRAs. In 1999, SAARI conducted a household level survey in Teso and Lango districts. It is therefore evident that household level secondary data exists for Teso and Lango. Before embarking on benchmarking for household level impact assessment, the COARD project intends to commission a study to establish the existing household data for Teso and Lango. Specifically, the study should look at the following sources of information, among others:

- Uganda Bureau of Statistics
- Economic Policy Research Council
- District, County and sub-County reports and Development Plans
- KDDP livelihood study for Kumi
- Livestock Census
- IFPRI household survey

Based on the COARD project objectives and outputs, and with assistance from the TA socio-economics, the study should also provide impact assessment strategies and methodologies for the COARD project.

The study will therefore inform CORSU on the need for a complementary data collection at household level giving details on sampling strategies, data collection methods and if need be, the intervals for collecting panel data. Likewise, COARD/ CORSU will aim to form sustainable partnerships with organizations that gather this type of information periodically.

The involvement of project implementers in the whole exercise is paramount.

In the inception report, economic analysis revealed an Internal Rate of Return (IRR) of 26%. Coupled with realistic assumptions in the sensitivity analyses, the robustness of the Project was clearly demonstrated.

One measurable indicator of the funded projects is the increase in output (net yield gain). By the same token, price information would be available both from aggregate data and the monitoring exercise by individual projects. Likewise the individual projects work with farmers to facilitate adoption of participatory research outputs. Employing a Cost/ Benefit analysis in an economic surplus model gives an indication of the economic returns accruing from the project activities.

References

Anandajayasekeram P.,and Martella D.R, (1999). Evaluation of Agricultural Research in Eastern Central and Southern Africa. Knowledge Technology and Policy **11** (4) pp 13-4.

Morgan P. (1997). The Design and Use of capacity Development Indicators. Political and Social Sciences Division, Policy Branch, CIDA. Quebec Canada.(IDRC).

UNDP (1998). Capacity assessment and development in a system and strategic management context. Management Development and Governance Division, technical advisory paper Number 3. New York :UNDP.

Annex 1. SUMMARY OF MONITORING & EVALUATION IN NARO

NARO's vision for planning, monitoring and evaluation is:

> "An integrated system adequately guiding the setting of rational research agenda, tracking performance and helping assure good governance, timely and effective decision-making for planning, directing and managing activities, and accountability to stakeholders".

Planning, monitoring and evaluation in NARO operates at three levels– Strategic, Tactical and Operational. The main focus and outputs of these are summarised below.

Table 1. Focus and outputs of NARO's three levels for planning, monitoring & evaluation.

	Strategic	Tactical	Operational
Focus	Development policies/ objectives, external environment Beneficiary status	Strategic prioritiesImpacts on beneficiaries Internal environment	Outputs / interventions Inputs Management
Outputs	Vision, mission, goal, policies Organisational structure Capacity-building plan Priorities & guidelines M&E Framework Changes in beneficiary status Changes in stakeholder needs Changes in external environment Adjustments in strategy	Identified outputs of NARO Programs / projects for generating output packages M&E framework Adoption of interventions Constraints to adoption New needs/ problems Adjustments in programs	Experiments / studies Inputs required (incl. budgets) Work-plans M&E framework Progress reports Technical accountability Input use accountability

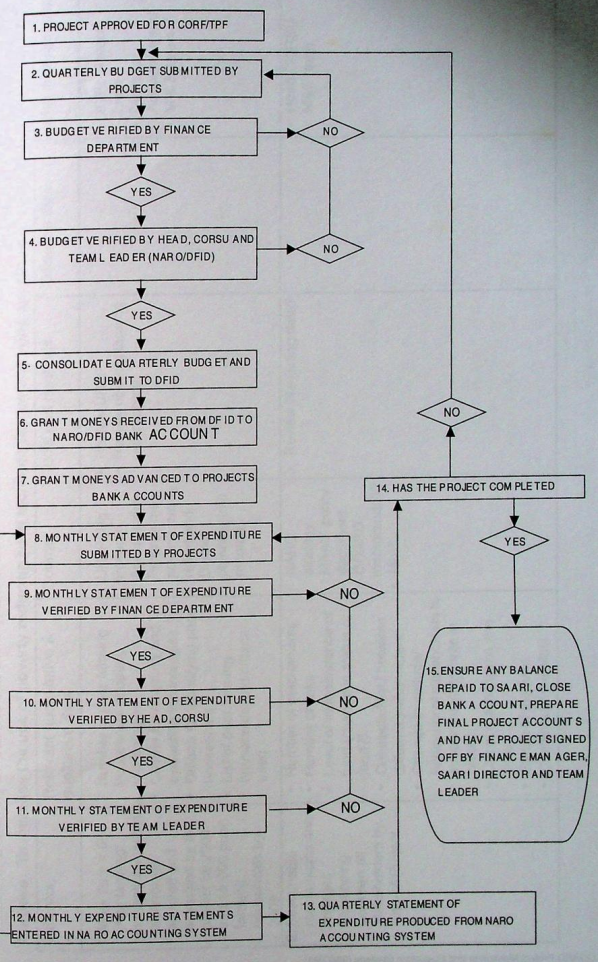
The principle requirements for monitoring and evaluation demanded from projects are:

- Clear project goal, objectives, expected outputs and activities
- Specific, measurable, relevant and timely Objectively verifiable Indicators (OVIs) and Milestones (with elements of quality, quantity and time)
- Identified means of verification
- Progress reports in agreed formats against OVIs and Milestones

NARO is establishing a computerised Research Management Information System (RMIS) which will provide managers at all levels with appropriate information, enabling them to make timely and effective decisions for controlling, planning and directing activities, and contribute to effective monitoring and evaluation. The RMIS can accommodate a range of reporting formats, and is expected to be implemented at each centre– copies will be sent to NAROSEC for their own oversight of NARO's activities and progress, but the RMIS is intended to assist managers at the research centre level. Accordingly, the principal monitoring tools and evaluation tools will be:

Principal monitoring tools		
Secretariat NARO Bulletin Quarterly technical & financial reports Annual report Annual research highlights Ugandan Journal of Agricultural Sciences Special reports Management Information System	Institutes Internal reviews Annual report Special reports Management Information System	Projects Internal reviews
Principal evaluation tools		
Organisational performance assessment Staff performance assessment External reviews Impact and beneficiary status Peer reviews Project completion reports		

Annex 2. OUTLINE OF PROPOSED FINANCIAL MONITORING SYSTEM



Output 1: Capacity for client oriented research and technology transfer strengthened within SAARI and stakeholders

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
1.1 Functional links established between relevant stakeholders by End-of-Year 2.	▪ Number of links ▪ Type of links eg research-farmer, farmer-farmer ▪ Number of meetings, workshops held since establishment of link	▪ ATFs project documents ▪ ATFs quarterly reports ▪ ATFs annual reports ▪ Workshop proceedings/ minutes of meetings ▪ Project visit reports ▪ Evaluation reports	▪ Review of ATFs documents ▪ Review & summary of ATFs quarterly & annual reports ▪ Review of minutes/ proceedings ofmeetings ▪ Synthesis of objectives and activities undertaken by the links from visit reports ▪ Stakeholder analysis ▪ **(Stakeholder linkage matrix, linkage mechanism performance matrix)**	▪ Type and number of existing links at start of the project between SAARI and other stakeholders	▪ ATFS Project implementersß CORSU/ M&E team
1.2 Management structure of ATFs established by End-of-Year 3.	1. Establishment of procedures for: ▪ Identifying/consolidating client needs ▪ Review and selection of projects ▪ Funding and facilitating projects ▪ Evaluating projects ▪ Disseminating project results	▪ CORSU/SAARI ▪ Finance office ▪ Institutional review reports ▪ Training programme ▪ Training materials ▪ ATFs documents ▪ Training reports	▪ SWOT analysis ▪ Staff performance appraisals ▪ End-of training evaluation ▪ Training needs assessment ▪ Periodic assessment to see if the structures are meeting their roles ▪ Defining roles of the management structures	▪ Projects management structure before COARD	▪ TA-SE ▪ TA-AR

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
1.3 At least 20 SAARI staff trained in procedures for on-farm, client-oriented research & 30 stakeholders trained in procedures for client-oriented approaches to technology transfer by End-of-Year 3	▪ Number of trainings conducted ▪ Quality of training ▪ Attendance list of trainees by name and organisation ▪ Training courses and modules ▪ Number of SAARI staff trained in and use procedures for on-farm, client-oriented research Number & organizations of stakeholders trained in and use procedures for COR	▪ Training reports by trainers ▪ CORSU reports	▪ Review of training evaluation forms	▪ Previous training areas/topics before COARD ▪ Previous participation of other stakeholders in SAARI trainings before COARD	▪ TA-AR ▪ M&E team

Annex 3: Summary of COARD Monitoring & Evaluation Framework

Purpose: To increase the use of poverty reducing rural technologies among wide spectrum of rural households

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
1. More than 4,000 poor farming households adopt technology adapted and evaluated by the project by 2004 and 18,000 poor farming households by 2009.	• Number of poor farming households adopting technologies • Criteria for adapting and evaluating technologies • Criteria for identifying poor households • List of poor farming households and criteria used	• UPAP(Ug Poverty Assessment Programme) poverty survey report and District planning unit records	• Review UPAP • Review district planning unit records		• ATFs project team • Districts Agriculture staff • M & E team
2. Sustainable mechanisms and linkages functioning between all stakeholders by End-of-Project.	• Number of mechanisms • Number of links • Level of independence of fund (change in status of fund?) • Contracts/MoU between different stakeholders • Change in attitude/ behaviour of stakeholders to support mechanisms in place • List of mechanisms and links • Status of the fund • Contents of the MoU	• NARO strategy, MAAIF policy document • COARD memoranda?? • MoU	• Review of existing data?		• Head CORSU • M&E team

OUTPUT 2: Client-oriented technology development and dissemination approaches developed and operational in target areas

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
2.4 Related information is made available to uptake pathways for at least 7 major crops or livestock enterprises by End-of-Project.	▪ Media preferences of uptake pathways ▪ List of uptake pathways and media for different farmer types ▪ List of information types	▪ Uptake pathways report, ▪ COARD Communication strategy ▪ NARO outreach initiative ▪ Projects dissemination strategies	▪ Review of NARO medium term plan ▪ Communication strategy ▪ Publications		▪ D & C specialist ▪ TA-SE
What is a farmer-research related network? e.g. NARO and network of research institutes How different is this from a link? A link is within a network– e.g. NARO linked to NAADS, but both are part of a network of agricultural research and extension					

OUTPUT 3: Client oriented approaches, and process for implementing agricultural technology funds promoted

3.1Two international reviews on the implementation of competitive agricultural technology funds published by 2004	▪ Number of international reviews ▪ Number of study tours on ATFs within and outside Uganda ▪ Criteria for evaluation of ATFs	▪ List of international reviews and study tours ▪ Evaluation criteria	▪ International review and back- to-office reports ▪ COARD manual ▪ Review of annual and quarterly reports		▪ TA-SE ▪ TA-AR ▪ RELO ▪ D&C Officer

OUTPUT 2: Client-oriented technology development and dissemination approaches developed and operational in target areas

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
2.1 Agricultural Technology Funds (ATFs) established and operational by End-of-Year 1.	▪ Procedures for operation of fund ▪ List and number of proposal applications to the fund ▪ List and number of funded projects ▪ Number of network participants/groups or organisations ▪ Role of network participants ▪ Type of network (SAARI-KARI-NAARI) ▪ Number and type of uptake pathways ▪ List, objectives and activities of networks	▪ Info pack ▪ ATF projects database ▪ Financial management guideline of ATFs ▪ Inception review 2001 reports ▪ OPR reports ▪ W/shop proceedings, progress reports ▪ ATFs quarterly reports Project visit reports	▪ Review of ATFs data base ▪ Review of Financial management guideline for ATFs ▪ Review progress reports ▪ Evaluation of objectives and activities	▪ Previous farmer-research networks and functions before COARD	▪ TA-AR ▪ ATFs Project teams ▪ M & E team

3.1Three national reviews of experiences in implementing participatory, demand-driven agricultural research and/or technology dissemination in N&E Uganda published by2004	▪ Number of national reviews ▪ Advocacy plan for promoting participatory, demand-driven agricultural research and/ or technology dissemination	▪ List of national reviews ▪ Policy decisions ▪ Types, performance and quality of other funds operating in Uganda	▪ National reviews ▪ COARD advocacy strategy ▪ MFPED-PAF reports ▪ Review of national documents ▪ MoF/PAF reports		▪ Head CORSU ▪ M & E team ▪ RELO ▪ D&C Officer
3.2At least three reports per year in various media describing project experiences with client-oriented approaches produced and distributed from 2000 to 2004	▪ Number of reports ▪ Communication strategy operational ▪ Lessons learnt in implementing COA	▪ ATFs and COARD project updates on experiences with COR	▪ Progress reports, ?? ▪ Review of progress reports ▪ Review of communication strategy ▪ Publications		▪ RELO ▪ D&C Officer

***OUTPUT 2: Client-oriented* technology development and dissemination approaches developed and operational in target areas**

Indicator	Relevant quantitative & qualitative data	Source	Tools and methods	Baseline data	Who is responsible
2.2 At least 10 research projects approved by ATFs Management Committee by End-of-Year 2 and 20 by End-of-Year 4.	▪ Number of projects approved, implemented and completed ▪ Number of applications to the fund ▪ Number of projects funded ▪ Selection procedures ▪ List, objectives and activities of projects ▪ Number of technologies developed with and endorsed by farmers	▪ Progress reports, W/shop proceedings ▪ ATFMC minutes ▪ Info pack	▪ Review ATFs documents ▪ Review quarterly reports ▪ Evaluate objectives and activities of projects		▪ Head CORSU
2.3 Appropriate technologies for at least 7 major crops or livestock enterprises developed and endorsed with farmers and made available by End-of-Project.	▪ Procedures for technology development (number of sites visited ▪ Review workshops ▪ List of technologies and criteria and procedure used for development and endorsement of technologies ▪ Number and source of technologies accessible Validation criteria for technologies	▪ Progress reports, w/shop proceedings, ATFs projects database	▪ Review of ATFs documents ▪ Review quarterly reports ▪ Stakeholder analysis? ▪ Research process?		▪ ATFs ▪ M & E team