



A CASE STUDY

ON

**THE EFFECT OF THE SCARDA CHANGE MANAGEMENT PROCESS ON
THE NATIONAL AGRICULTURAL RESEARCH INSTITUTE OF THE
GAMBIA**

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ACRONYMS

AIS	Agricultural Innovation System
ARM	Agricultural Research Management
CAADP	Comprehensive Africa Agriculture Development Programme
CORAF	Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles
DFID	Department for International Development (UK)
FARA	Forum for Agricultural Research in Africa
FI	Focal Institution
IAC	Inter Academy Council
ITC	International Trypanosomiasis Centre
NARI	National Agricultural Research Institute
NARS	National Agricultural Research System
NGO	Non Governmental Organization
PAP	Participatory Action Plan
SCARDA	Strengthening Capacity for Agricultural Research and Development in Africa
SWOT	Strengths, Weaknesses, Opportunities and Threats

EXECUTIVE SUMMARY

Introduction

The poor performance of agriculture in sub-Saharan Africa is known to be largely due to the lack of effective and client- responsive agricultural research and development that could generate appropriate technologies and innovations to stimulate the agricultural development process. As a contribution to address this challenge, the Forum for Agricultural Research in Africa (FARA), with support from the United Kingdom's Department for International Development (DFID), developed a project for Strengthening Capacity for Agricultural Research and Development in Africa (SCARDA). The project sought to enhance the technical and managerial capacities of the beneficiary selected Agricultural Research Institutions for effective performance in the delivery on their mandates. To ensure a smooth and successful transition and navigation in the change journey to the desired destination, CORAF Region of SCARDA developed a change management strategy to guide the various interventions for the selected Focal Agricultural Research Institutions (FIIs). The National Agricultural Research Institute (NARI) of The Gambia was one of the FIIs which benefitted from the SCARDA Project. This summary captures the experiences and lessons learnt by NARI from the SCARDA change management efforts.

Methodology

A blend of documentary reviews, organizational audit, focus group discussion and participatory workshop were employed to obtain the information to form the basis for the case study report.

The Situation of the National Agricultural Research System of the Gambia before the SCARDA Interventions

The situation of the National Agricultural Research System (NARS) of The Gambia before the SCARDA interventions was aptly described by the findings of a SCARDA scoping study and two institutional analyses conducted between 2007 and 2008. The Gambia NARS had limited core government funds for research, was over dependent on external donor funding which was not necessarily in line with national research priorities, and was characterized by weak institutional linkages among its key stakeholders. The NARS had inadequate human resources with the requisite knowledge and experience to deliver quality research, and poor conditions of service for agricultural researchers. This led to a high attrition rate coupled with an attitude of putting self interest before that of the institute, especially with regard to wining consultancies.

Processes Used to Analyze Prevailing Situation and Desired Future of the NARS

Three main processes were used in analyzing the capacity needs and in developing action plans for strengthening the agricultural research in the Gambia. These were the scoping study in 2007, two institutional analyses, and a series of management training workshops and technical training for staff. The main tools used in the Institutional Analysis were stakeholder mapping, forced-field analysis and workshops. These tools were very effective in highlighting the weak linkages and collaborations

among the key holders and the ‘undesired’ state of the agricultural research in the Gambia and in facilitating the envisioning of a future desired state. The tools also brought to the fore the propelling forces towards the desired state as well as the restraining forces towards maintaining the *status quo*.

The Change Management Process

In order to facilitate the change journey of the Gambia NARS towards the desired future state CORAF initiated a change management process with a focus on NARI with the hope that it would serve as the catalyst to strengthen the entire NARS. The Ghana Institute of Management and Public Administration (GIMPA) was contracted as the change management facilitator.

The Change Management Conceptual Framework

In order to effectively facilitate the process, a conceptual framework was developed to guide the change management process. The Framework served as an anchor around which SCARDA Project capacity building activities revolve. The key elements of the Framework are the external stimulus or catalyst that triggered the change process (the joint institutional analysis), the SCARDA project capacity building activities, the change management interventions, leading to the desired future state which will lead to the attainment of SCARDA project objectives and ultimately achieve its purpose.

The Change Journey of NARI

The change journey of NARI started with the development of the Participatory Action Plan (PAP) during the first and second Agricultural Research Management (ARM) Workshops involving the three other SCARDA FIs (IER in Mali, DGRST—CRAL in Republic of Congo, CSIR—CRI in Ghana) in the CORAF/WE CARD region. Prior to the implementation of the PAP, a change management reflection workshop was organized for a cross section of NARI staff to fine-tune it. The revised PAP included other critical capacity building dimensions such as marketing and public relation skills that were overlooked previously as well as corresponding mentoring support for the change management activities.

Implementation of the Revised PAP

To drive the change process, various capacity building interventions outlined in the revised PAP were provided to a cross-section of staff, including the leadership of NARI and a few representatives from other NARS organizations (University of The Gambia, Ministry of Agriculture of the Gambia, Women Farmers Association, ITC). The main capacity building interventions in the PAP included change management and related core competencies; mentoring services; establishing change champions to drive the change process from within; marketing and public relations skills development; research proposal writing skills; financial resource management skills development; gender mainstreaming skills; and long-term training (MSc courses) to enhance their technical and research capacity. These interventions were accompanied by appropriate mentoring support to limit the tendency of falling back to the old undesirable ways of managing and conducting agricultural research.

The Methods/ Tools Used to Deliver the Training Interventions

The methodology used to deliver the capacity building interventions sought to blend the development of requisite knowledge, skills and positive attitudinal orientation. This was accomplished through the

engagement of participants in critical reflection processes towards self-discovery as well as the use of various analytical tools such as the problem tree analysis, SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis and stakeholder analysis, Syndicate group work, plenary session and use of case studies.

The Timeline Duration of the SCARDA Activities in the Gambia

The time line for the implementation of the activities of the SCARDA project reveals delayed implementation with most activities concentrated in the last year of the Project, 2010, which had negative repercussions on its performance.

Outcomes at Individual NARI Staff Level

At the individual level in NARI, there has been change in attitude from that of laid-back to a more business- oriented approach to work. Individual staff had taken the initiative to start various research and income generating activities for NARI; for example, initiation of commercial vegetable production, cultivation of medicinal plants, and manufacture of a seed planter for commercial use. Staff are also now more willing to go the extra mile to promote the common good of NARI and there is increased realization of the need for team work across the different categories of staff of NARI, particularly in research and consultancy proposal writing being undertaking among interdisciplinary scientific staff. The MSc graduates have also initiated maize variety purification and fish breeding research projects, the design of equipment to press weeds into charcoal for household use, and the manufacture of a rice seeder for commercial use. Self-confidence has been built among the various beneficiaries of the SCARDA training activities.

Outcomes at NARI Organizational Level

The organizational audit conducted indicated significant improvements in human resource management systems, procedures and practices in NARI. The management style has changed from that of authoritarian and autocratic to one that is more participatory, evidenced by the increase in staff involvement in management decision making processes as well as more devolution of power to the departmental/unit/programme levels. Furthermore, a cadre of research scientists and potential leaders for the Institution have been developed with four of the ten graduates from the SCARDA supported training programme already appointed heads of departments/programmes in NARI.

NARI has put in place accounting practices with internal controls relating to handling of cash and deposits, approval of spending and disbursements, that conform to acceptable international standards. Different accounts have now been opened for the various programmes and regular financial statements and balance sheets are provided in a timely manner to Board of Directors, staff and other relevant stakeholders. The efficient financial practices have resulted in NARI moving from deficit financing to a positive balance in their accountant system as well as being able to pay staff social security. The financial situation continues to improve as the newly formed business winning teams under the SCARDA project began to win research grants proposal (succeeding in two out of five proposals written in 2011).

The observed shifts in mind-sets, attitudes, and practices at both the individual and organizational levels are largely attributed to the training methodology used which integrated acquisition of knowledge, skills and positive attitudinal orientation.

Outcomes at NARS Level

There is emerging strengthening of relationships and collaboration among some of the partners of NARS [NARI, Department of Agriculture, the University of The Gambia, International Trypanosomiasis Centre (ITC)] in the areas of agricultural field trials with students, teaching supervision of students' research project work, and sharing of library facilities. There is also joint research between NARI and agro-business enterprise in the manufacture of a rice seeder and thresher for commercial use as well as some farmer groups to produce medicinal plants on a commercial basis. The collaboration between NARI and the Ministry of Agriculture is also deepening as the latter regularly consults the top management of NARI on agricultural policy related issues. Indeed a significant consultancy service provided by NARI to the Ministry of Agriculture was led by a SCARDA sponsored MSc graduate to conduct field trials to assess the efficacy of imported fertilizers. This led to the discovery that some of the fertilizers were sub-standard, and the order was subsequently cancelled, thus saving the government from a huge loss of foreign exchange.

The limited impact at the NARS level at large was partly attributed to the limited involvement of the relevant NARS Institutions at the beginning of SCARDA. As a result, they lacked a sense of ownership and commitment to the project.

Tracking of Progress

NARI did not have a well-defined internal monitoring mechanism for tracking progress being made which tended to undermine the adequate measurement of the effects of the SCARDA Project on the NARI and the NARS.

Remaining Things to Be Done to Achieve the SCARDA Purpose

Even though a strong foundation has been laid through the SCARDA Project interventions, the ultimate purpose of strengthening the NARS to deliver agricultural research outputs that can speed up the development process and contribute to poverty reduction in the Gambia, has not been achieved. Indeed, the short duration (mainly 2010) of the project implementation has left many critical activities incomplete. These include shallow understanding and internalization of the agricultural innovation system linked to improving commodity value chains among the key stakeholders of the NARS; the on-going struggle between promoting self-interest rather than organizational interests among staff at all levels; inability to provide leadership and managerial capacity building for the new cadre of scientists assuming leadership positions in NARI; the fragile partnerships and collaboration about the NARS; and the inability to complete the institutional restructuring and some of the short term technical training courses.

Against the backdrop of the above, there is a critical need for more initiatives in the form of short training workshops and integration of the innovation systems perspectives into the curricula of agricultural training institutions; and the need to sustain and reinforce the efforts towards internalizing the emerging positive attitudes such as business orientation, team work, accountability and transparency. The danger of lapsing back into the prevailing situation prior to the inception of SCARDA is very likely if there is no continuity in this direction. It is important that the new crop of energetic and highly motivated scientists is equipped with the requisite managerial and leadership skills to enable them to function effectively in their new positions. The nascent and fragile stage of the collaboration among some NARS organizations needs continued nurturing to mature. NARI needs to develop a long-term strategic plan to take advantage of emerging opportunities and effectively deliver on its mandate.

Challenges

The major challenges which tended to limit the outcomes of the SCARDA project included bureaucracy leading to the delay in the implementation, an imbalance in the allocation of SCARDA resources in favour of knowledge and skills development to the neglect of the provision of research equipment and facilities and overcrowding of project activities in the last year of the project 2010.

Lessons Learned

A programme that involves attitudinal changes is a long term journey that requires systematic and comprehensive training and follow up mentoring support delivered using a blend of methodologies. It should also go beyond strengthening knowledge and skills to include provision of necessary equipment and facilities as well as creation of an enabling environment to facilitate the effective application of the knowledge and skills.

Also stakeholders' involvement in the planning, design, implementation, monitoring and evaluation stages of the project promotes and fosters the development of effective partnership building and collaboration.

Change management is a process that involves continuous learning and feedback into action towards the desired changes and thus requires clearly defined indicators and targets to adequately measure performance and draw lessons to guide fine-tuning of the change management interventions.

The strategy of anchoring the various SCARDA capacity building activities on a change management framework make them effective means to delivering specific results or desired changes.

Recommendations

In view of the fact that the actual implementation of the SCARDA Programme was too short, resulting in the inability to complete all the activities and coupled with the need to consolidate the gains made, it is recommended that a further period of support be provided.

Subsequent capacity building project initiatives should seek to achieve a balance in the allocation of financial resources between knowledge/skills acquisition and critical research equipment and facilities to facilitate the application of the acquired knowledge/skills.

Future interventions intended to use a focal institution to impact on the wider NARS should involve the key NARS organizations right from the planning and design stages through implementation, monitoring and evaluation in order to develop and engender a sense of ownership and commitment among all stakeholders for effective performance.

1.0 INTRODUCTION

1.1 Background

The poor performance of agriculture in sub-Saharan Africa is widely recognized (Haggblade *et al.*, 2004). A key factor in the poor performance of agriculture is the inability of agricultural research and development in the region to undertake effective and client-responsive research that could generate appropriate technologies and innovations to stimulate the agricultural development process (IAC, 2004). As a contribution to resolve this agricultural development challenge, the Forum for Agricultural Research in Africa (FARA), with support from DFID, developed a project for Strengthening Capacity for Agricultural Research and Development in Africa (SCARDA). The project sought to enhance the technical and managerial capacity of the beneficiary Agricultural Research Institutions (Focal Institutions) to better deliver on their mandate. This required changes or transitions into new ways of thinking, managing and conducting agricultural research. To ensure a smooth transition, the CORAF Region of SCARDA developed a change management strategy to guide the various interventions in the Focal Institutions (FIs) and ensure that they are able to successfully navigate the change journey and accomplish the desired ends. The SCARDA project ended in December 2010 and it was found desirable to take stock and document case studies of the change management processes and outcomes in some of the Focal Institutions. This report captures the experiences and lessons learnt from the change management efforts in the National Agricultural Research Institute (NARI) of The Gambia.

1.2 Objectives of the Study

The objectives of the case study as captured in the Terms of Reference (ToR) are to:

- i) Review and document the processes/approaches and tools used to identify the weaknesses and capacity strengthening needs of the National Agricultural Research Institute (NARI) of The Gambia and how these capacity gaps were addressed.
- ii) Critically analyse and document the outcomes of the Change management Action Plan developed and implemented by NARI and the significant changes that have occurred to individuals and various organizations involved in agricultural research for development in The Gambia.

The expected outputs of the case study are indicated below:

- i) A synthesis of the institutional analysis processes used to identify capacity gaps at NARI and how such gaps were addressed, highlighting the achievements and failures.
- ii) A distillation of lessons from the change management experiences of NARI which can guide similar future interventions.

1.3 Methodology

In order to generate deeper insights as to ‘why’ and ‘how’ various changes occurred or failed to occur at NARI through the interventions of SCARDA, it was found appropriate to employ more qualitative and participatory research methods. Specific methods used to collect relevant data for analysis to form the basis for the case study are outlined below:

- i) **Review of documents:** The consultants undertook a critical review of relevant documents, including the SCARDA scoping study report, project review report and reports of the various change management interventions in NARI.
- ii) **Organizational audit:** The consultants conducted an organizational audit to assess the extent to which the change initiatives implemented have resulted in redefinition of organizational vision, mission, systems, procedures, planning and management, norms and value change, increase in knowledge, skills, competencies and improvement in the overall organizational performance. This involved in-depth interviews with a cross section of staff at NARI, complemented with a critical documentary review to capture their perspectives on the above organization and management related issues.
- iii) **Key informant interviews:** Relevant key informants like agricultural personnel, policy makers and non-governmental organizations within the agricultural research system of Gambia, were identified and discussions held with them either in small focus groups or as individuals.
- iv) **Participatory workshop:** The key stakeholders were brought together for a one- day workshop where the various perspectives captured during the interviews, focus group discussions and documentary reviews were further subjected to critical and focused discussions to build consensus on the major outcomes of the SCARDA project, the critical success factors, major challenges, and the lessons learnt.

2.0 THE NATIONAL AGRICULTURAL RESEARCH SYSTEM IN THE GAMBIA BEFORE SCARDA CHANGE MANAGEMENT INTERVENTION AND ANALYTICAL TOOLS USED.

2.1 Overview of the NARS Situation in the Gambia Before SCARDA Interventions

The situation of the National Agricultural Research System in the Gambia was comprehensively described in the SCARDA scoping study carried out in July 2007 and further analysis in the first and second institutional analyses carried out in November 2007 and February 2008. The combined findings of these three investigations painted the situation of the national agricultural research system (NARS) in the Gambia before the SCARDA interventions as follows:

- Limited core government funds to run research programmes. The government covered mainly salary and central running costs such as utilities. Agricultural research activities were over-dependent on external donor funding which was not necessarily always in line with national research priorities.
- Weak institutional linkages among key stakeholders of the NARS resulting in the inability to take advantage of synergy.
- Inadequate critical mass of human resource, with the requisite knowledge and experience for quality research delivery.
- Inadequate key management skills at all levels.
- Poor conditions of service for agricultural researchers leading to high attrition.
- Inability to effectively carry out research due to inadequacy of operating funds and infrastructure.
- Negative attitudes like self-centredness and a lackadaisical attitude to work.

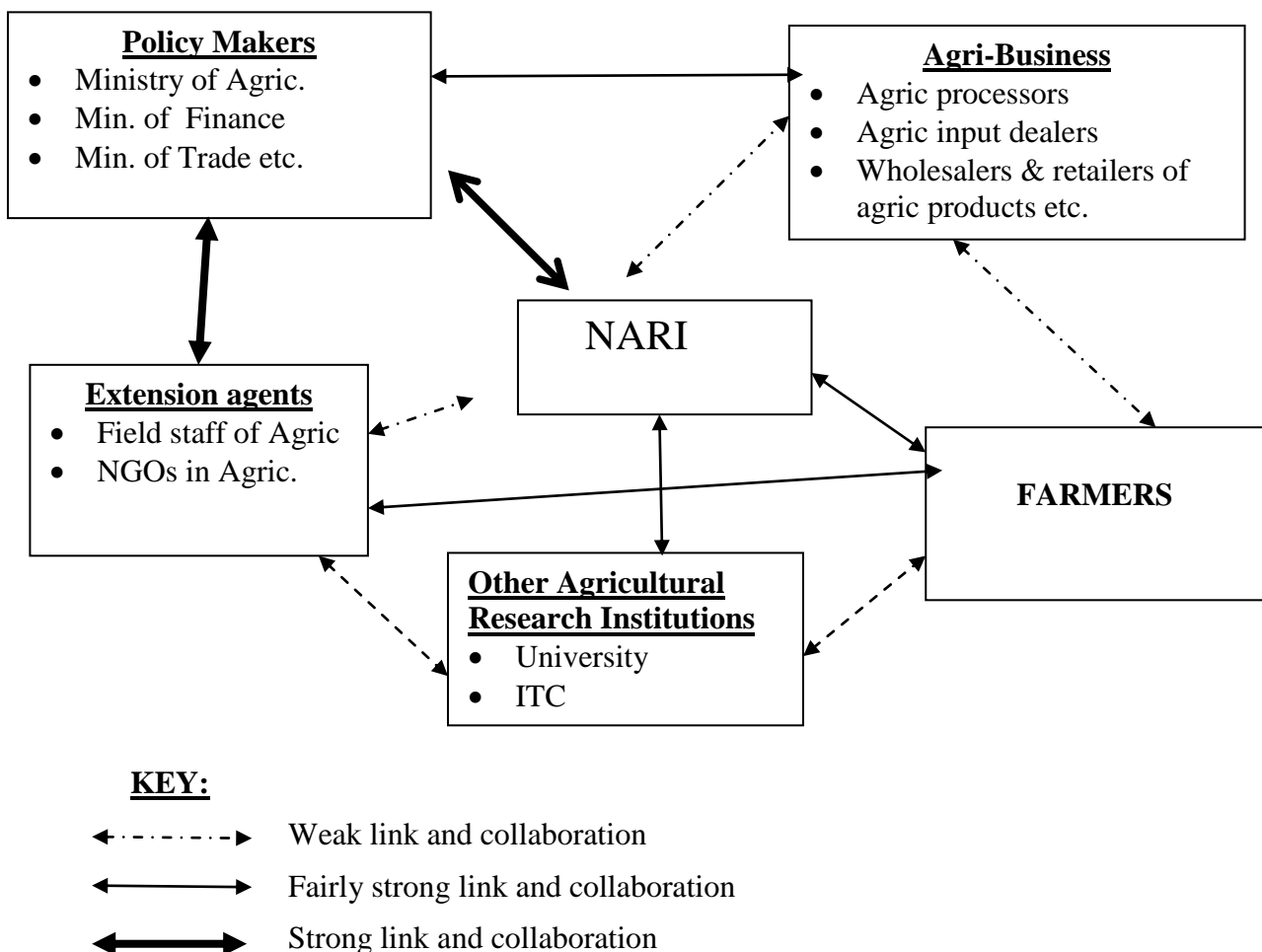
2.2 Processes Used to Analyze Prevailing Situation and Desired Future of the NARS

Three main processes were used in analyzing the capacity needs and in developing action plans for strengthening agricultural research in the Gambia. The scoping study in 2007, which involved consultations with key stakeholders of the Gambia NARS, provided a foundation. This was followed by two institutional analyses, involving policy makers at the Ministry of Agriculture, other research institutions such as ITC, the University of the Gambia, farmer organizations and relevant private sector organizations. The institutional analysis identified various weaknesses of the Gambia NARS and envisioned a desired future state to be accomplished, using NARI as entry point. The third process consisted of a series of management training workshops and technical training for staff such as the MSc training.

2.3 Methods/ Tools Used in the Institutional Analysis

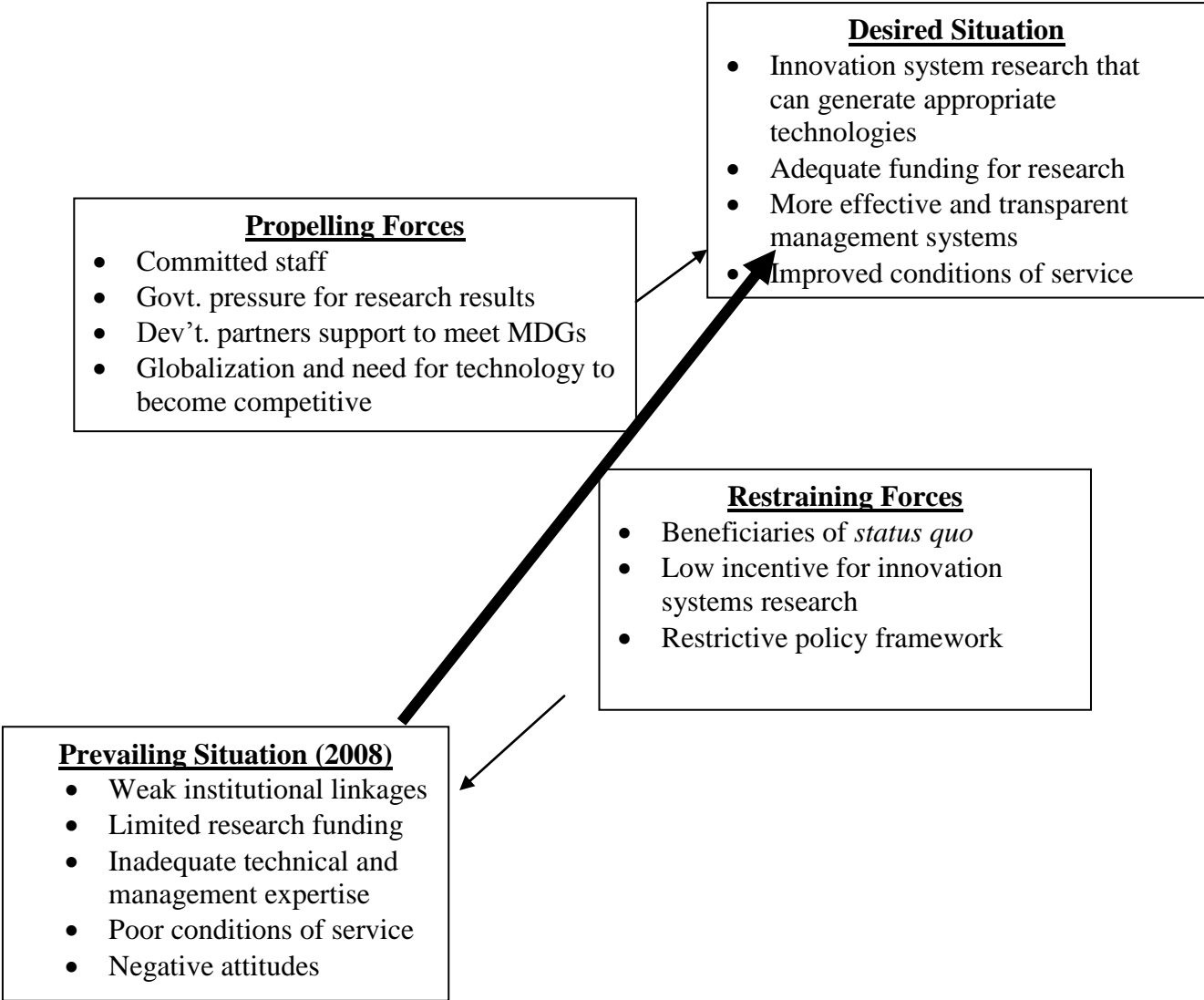
A major tool used in the institutional analysis was the stakeholder mapping and interactions. This tool was effective in highlighting the weak linkages and collaborations among the key holders, thereby denying the NARS from benefiting from synergy effect. This is captured in figure one below.

Figure 1: Stakeholder Mapping of Interactions and Collaborations of the Gambia NARS before SCARDA (2007)



Another important tool which was used in the institutional analysis was the Force Field Analysis technique. This tool helped to highlight the undesired state of the agricultural research in the Gambia and envisioning a future desired state. The tool also brought to the fore the propelling forces towards the desired state as well as the restraining forces towards maintaining the *status quo* as shown in Figure 2 below:

Figure 2: Force Field Analysis



3.0 THE CHANGE MANAGEMENT PROCESS

In order to facilitate the change journey of the Gambian NARS towards the desired future state as illustrated in Figure 2 above, CORAF initiated a change management process with a focus on the Gambia National Agricultural Research Institution with the hope that it would serve as the catalyst to strengthen the entire NARS. GIMPA was contracted as the change facilitator. The framework, methods / tools used by GIMPA are elaborated in the subsequent sections.

3.1 The Change Management Conceptual Framework

The conceptual framework that guided the change management process is presented in Figure 3 below.

Figure 3: Conceptual Framework for CORAF Change Management Process

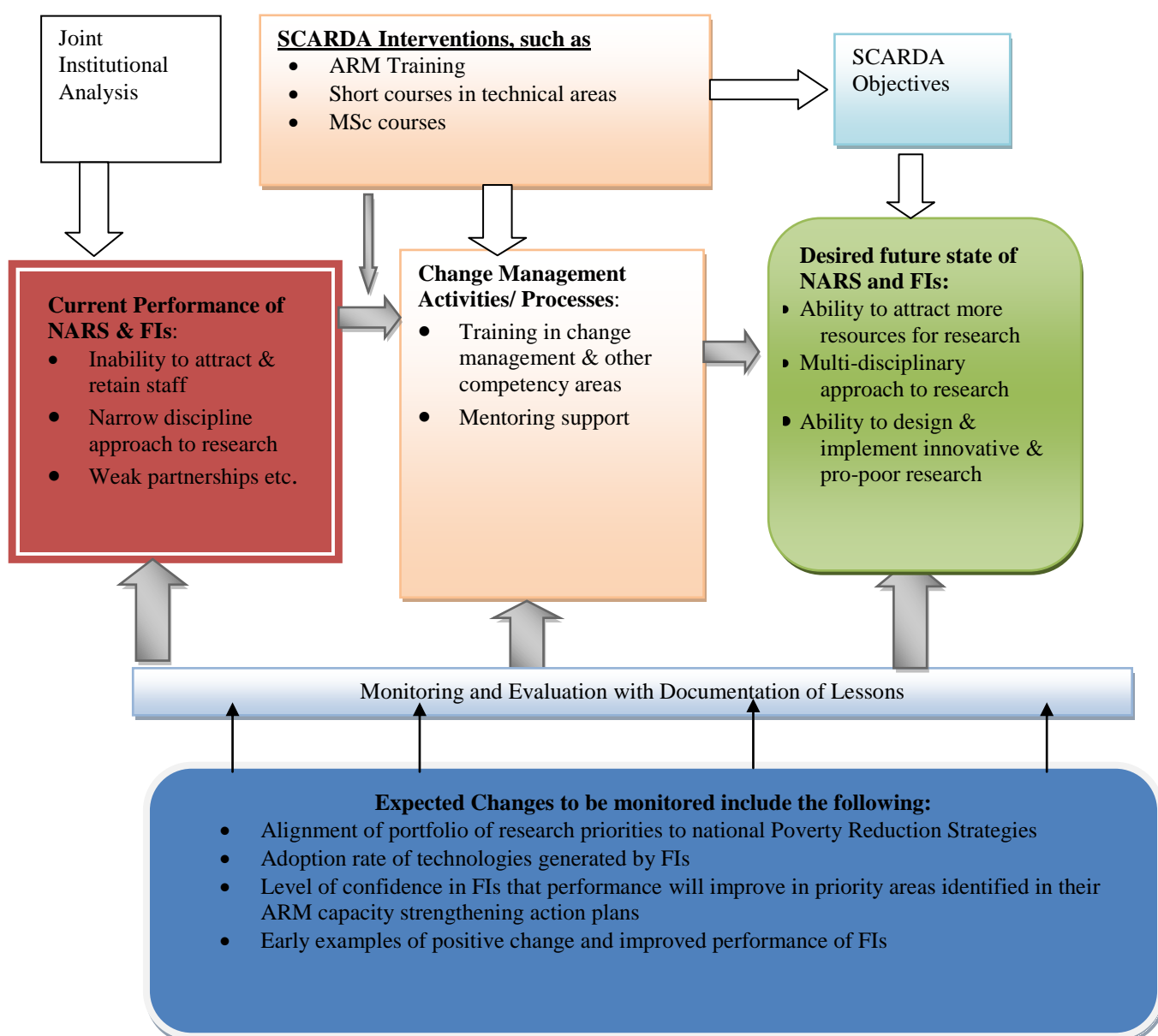


Figure 3 shows that the external stimulus or catalyst that triggered the change process in NARI was the joint institutional analysis. This culminated in the identification of the current

performance of agricultural research in the Gambia which was considered as undesirable, and envisioning the future desired state. This formed the basis for the various SCARDA interventions (technical and management training as well as the mentoring support) to facilitate the change journey from the prevailing undesired state to the future desired state.

3.2 The Change Journey of NARI

The change journey of NARI started with the development of the Participatory Action Plan (PAP) during the first and second Agricultural Research Management (ARM) Workshops involving the other SCARDA Focal Institutions (FIs). To facilitate the implementation of the PAP, a change management workshop was organized for a cross section of NARI staff. During this workshop, the participants reflected on their PAP developed during the ARM workshop and fine-tuned it for implementation as shown in Table 1 below. The revised PAP included other critical capacity building dimensions such as the marketing and public relation skills that were previously overlooked. The revised PAP also identified the corresponding mentoring support for the change management activities.

Table 1: Revised PAP of NARI, highlighting Mentoring Needs and Timeframe

Desired Future (Objectives)	Indicators	Key Activities	Mentoring Needs	Time For Completion	Mode of Delivery
1) NARI Restructured to Respond to Emerging Realities by 2011	Number of effective & functional thematic based programs established Number of qualified personnel serving in their correct positions Level of job satisfaction of staff	<ul style="list-style-type: none"> Constitute a working group to restructure NARI Undertake staff rationalization and re-alignment Design and operationalize an effective staff performance management system 	<p>Guidance on how to undertake restructuring effectively</p> <p>Guidance on how to develop a manual on staff appraisal and development</p>	<p>March 2010</p> <p>March 2010</p>	Through internet and face to face discussions
2) NARI able to attract and retain multidisciplinary and qualified staff by 2011	<ul style="list-style-type: none"> Lesser attrition rate Existence of highly qualified personnel in the institute Increased internally generated income 	<ul style="list-style-type: none"> Design and institutionalize improved conditions of service Create opportunities for professional training Institute Health Insurance System and Credit Scheme for staff Improve the induction process for new staff 	<ul style="list-style-type: none"> Advice on how to create an attractive incentive package for NARI Guidance on how to develop a health insurance programme as well as setting up a viable credit union 	<p>March 2010</p> <p>March 2010</p>	<p>Email and personal contact with mentor(s)</p> <p>Through internet and face to face discussions</p>

Desired Future (Objectives)	Indicators	Key Activities	Mentoring Needs	Time	Mode of Delivery
3) Internally generated revenue at NARI to increase from current level to 25% by 2011	Level of internally generated income` Quality of public perception of NARI and its products and services.	<p>Constitute a Business Winning Team to strategies on how to attract more business to NARI</p> <p>Develop and operationalize a marketing plan for NARI</p> <p>Organize training on how to write winning research and consultancy proposals.</p> <p>Train Senior and Middle level researchers on Budgeting and costing</p> <p>Develop a database of possible funding agencies and their Templates.</p> <p>Training of business winning team on Negotiation skills</p> <p>Build partnerships with key stakeholders to ensure that technologies generated are responsive to needs of clients.</p> <p>Periodically review and offer backstopping in writing of winnable proposals</p>	<p>Guidance in making the business winning team more effective</p> <p>Guidance in developing Marketing Plan</p> <p>Skills in writing winnable proposals</p> <p>Skills in budgeting</p> <p>Advise on possible funding opportunities</p> <p>Skills in negotiation</p> <p>Guidance in partnership building</p> <p>Annual visit and backstopping in writing winnable proposals</p>	<p>March 2010</p> <p>March, 2010</p> <p>February 2010</p> <p>February 2010</p> <p>March 2010</p> <p>June 2010</p> <p>March 2010</p> <p>At least once yearly</p>	<p>E-mail and telephone</p> <p>Workshop to develop Marketing Plan</p> <p>Workshop on proposal writing skills</p> <p>Should be part of the workshop on proposal writing</p> <p>E-mail</p> <p>Workshop</p> <p>E-mail</p> <p>Face to face contact and discussions.</p>

Desired Future (Objectives)	Indicators	Key Activities	Mentoring Needs	Time	Mode of Delivery
4) More effective and responsive financial management system put in place by the end of 2010	<p>Length of time it takes to process a normal financial request for fieldwork.</p> <p>Level of accuracy and openness of financial records</p> <p>Quality and timeliness of quarterly financial reports to program leaders and Management</p>	<p>Recruit more qualified key financial staff</p> <p>Develop and operationalize Financial Management System and Procedures.</p> <p>Develop Intranet System needed to enable program leaders to speedily access their accounts any time</p> <p>Acquire and appropriate financial software package and train staff on it</p>	<p>Guidance in Financial Management system</p> <p>Diagnostic visit by mentors to help determine appropriate financial software</p>	<p>March</p> <p>March 2010</p>	<p>Visit and discussions</p> <p>Face -to-face discussions</p>

3.2.1 Implementation of the Revised PAP

Recognizing that the motivation to change may be futile if people do not have sufficient capacity to drive the change process successfully, various capacity building interventions were provided to a cross-section of staff, including the leadership of NARI and a few representatives from other NARS organizations (University, Ministry of Agriculture, The National Women Farmers Association, ITC etc.) to drive the change process. The main capacity building interventions included the following:

- Change management and related core competencies.
- Mentoring services.
- Establishing change champions to drive the change process from within.
- Marketing and public relations.
- Research proposal writing skills.
- Financial resource management training.
- Gender mainstreaming.
- MSc. courses to enhance their technical and research capacity.

To minimize the tendency of falling back into the old undesirable ways of managing and conducting agricultural research, various mentoring support as outlined in the revised PAP was provided.

3.3 The Methods/ Tools Used to Deliver the Training Interventions

The methodology used to deliver the capacity building interventions sought to blend the development of requisite knowledge, skills and positive attitudinal orientation. This was accomplished through the engagement of participants in critical reflection processes towards self-discovery as well as the use of various analytical tools such as problem tree analysis, SWOT analysis and stakeholder analysis.

Other learning techniques which were employed to enhance the learning processes included syndicate group work, plenary session and use of case studies.

3.4 The Timeline of SCARDA Activities in the Gambia

The time line for the implementation of the activities of SCARDA, as shown in Table 2, reveals delayed implementation with most activities concentrated in 2010. This had negative impacts on the outcomes of the project.

Table 2. Timeline of SCARDA Activities in NARI

Year	Activity	Organizations and Participants Involved
2007	<ul style="list-style-type: none"> • Scoping study • 1st Institutional Analysis 	<ul style="list-style-type: none"> • NARS Stakeholders
2008	<ul style="list-style-type: none"> • 2nd Institutional Analysis • ARM workshops 1 and 2 • Monitoring and Evaluation Workshop 	<ul style="list-style-type: none"> • NARS Stakeholders
2009	<ul style="list-style-type: none"> • Mid-Term Review • MSc staff training 	<ul style="list-style-type: none"> • SCARDA stakeholders • NARI staff
2010	<ul style="list-style-type: none"> • Change management mentoring workshops • Research proposal writing • Marketing and public relations skills development workshops • Technician training • Gender Mainstreaming Workshop • Tracer study • Lessons learned workshop 	<ul style="list-style-type: none"> • Cross-section of NARI staff • Scientific staff of NARI staff and representatives from University, ITC and Women Farmers Association • Cross-section of NARI staff and representatives from Agro-business, University, and Ministry of Agriculture • Technical staff of NARI • Cross-section of NARI staff • University, Farmer Groups, Agricultural Graduates and Employers • SCARDA Stakeholders

4.0 OUTCOMES OF THE CHANGE MANAGEMENT PROCESS

The outcomes of the change management process were assessed at the individual and organizational levels at NARI as well as the extent to which NARI reached out to the other NARS institutions in the Gambia.

4.1 Outcomes at Individual NARI Staff Level

A number of significant outcomes have been noted at the individual level in NARI as indicated below:

- Change in attitude from that of a laid back to a more business- oriented approach to work. This was manifested in a number of individual staff who had taken the initiative

to start various income generating activities for NARI. For example, the under-utilized NARI Farmers' Centre has initiated commercial vegetable production and NARI has started commercial cultivation of medicinal plants and the manufacture of a seed planter for commercial use. Indeed, the individuals are now more willing to go the extra mile to promote the common good of NARI.

- Increased realization of the need for team work across the different categories of staff of NARI. This was manifested through the joint proposal writing among interdisciplinary scientific staff.
- Individual staff who benefitted from the various training(s) have acquired additional knowledge and skills that have been put into immediate use to some extent. For example, all the MSc graduates have initiated various agricultural experiments that they hitherto could not. Some of these experiments include maize variety purification, fish breeding, design of equipment to press weeds into charcoal for household use, and manufacture of a rice seeder for commercial use.
- Beneficiaries of the various training (professional, short and long term training) developed self-confidence in their field of expertise.

4.2 Outcomes at NARI Organizational Level

- The organizational audit conducted indicated significant improvements in human resource management systems, procedures and practices in NARI. There is a human resource management policy in place that outlines procedures for recruitment and retention of qualified staff for NARI. The organization has schemes of service and job descriptions with well defined reporting relationships.
- Staff reported a change in management style from that of an authoritarian and autocratic style to a more participatory approach. This is evidenced by the increase in staff involvement in management decision making processes as well as more devolution of power to the departmental/unit/programme levels.
- NARI has developed a cadre of research scientists and potential leaders for the Institution. In effect, four of the ten graduates from the SCARDA supported training programme have been appointed heads of departments/programmes of NARI.
- NARI has put in place accounting practices, including internal controls relating to handling of cash and deposits, approval of spending and disbursements, that conform to acceptable international standards. Under the previous financial management system all income was lodged in one account which was shrouded in secrecy. There are now different accounts opened for the various programmes and regular financial statements and balance sheets timely are provided to the Board of Directors, staff and other relevant stakeholders. There is also now a quicker response to financial requests for programme activities. These efficient financial practices have resulted in NARI moving from deficit financing to a positive balance in their accounting system as well as the ability to pay staff social security.
- A business winning Team has been established which has enabled NARI to win two grants of five of five proposals written in 2011. Previously, scientists were winning research and consultancy grants for themselves rather than for the institute. This change can be attributed to the knowledge and skills acquired through the training

workshops in research grant proposal writing as well as the follow-up mentoring support provided.

The observed shifts in mind-sets, attitudes, and practices at both the individual and organizational levels are largely attributed to the training methodology used which integrated acquisition of knowledge, skills and positive attitudinal orientation.

4.3 Outcomes at NARS Level

There is emerging strengthening of relationships and collaboration among some of the partners of NARS. For example, the Faculty of Agriculture and Natural Science of the University of the Gambia now collaborates with NARI scientists to undertake some agricultural field trials with students. The NARI scientists also teach and supervise student research projects. NARI has a better equipped library which is used by both faculty and students of the University.

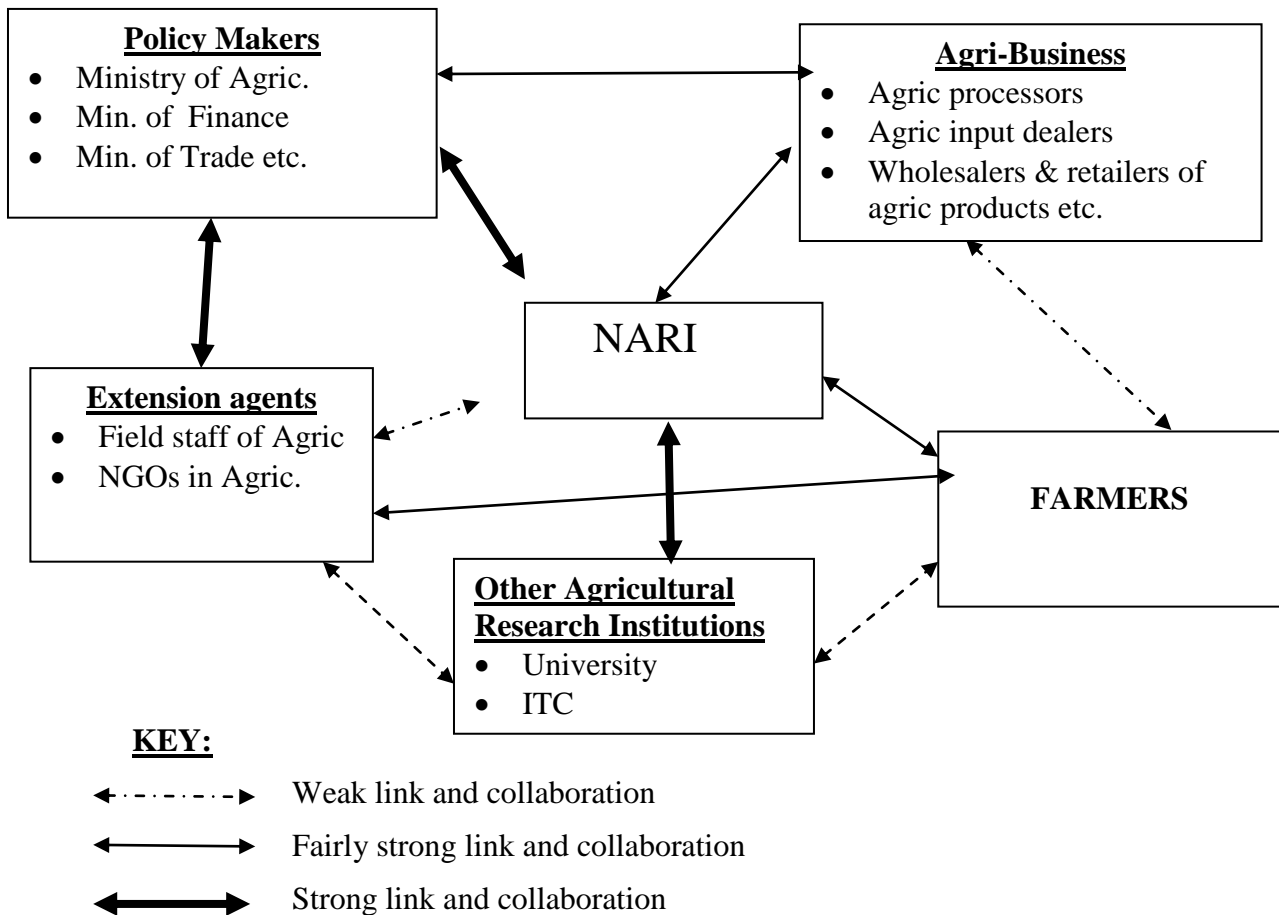
Similar sharing of resources to undertake agricultural research activities was observed between NARI and ITC. Indeed NARI uses the facilities of ITC to undertake research related to animal science. Such willingness to share resources for agricultural research should be encouraged as it is not practically possible to provide all research institutions with all the requisite advanced research equipment and facilities. For an effective NARS, each institution could be equipped with some specialized and strategic research facilities that could be shared by other researchers, and thereby optimizing the use of limited resources.

Another example of collaboration is evidenced by the joint research between NARI and agribusiness enterprise in the manufacture of a rice seeder and a thresher for commercial use. Furthermore, NARI is working with some farmer groups to produce medicinal plants on a commercial basis.

Collaboration between NARI and the Ministry of Agriculture is also deepening. For example one of the SCARDA sponsored MSc graduates was requested by the Ministry of Agriculture to lead a research team to conduct field trials to assess the efficacy of imported fertilizers. This led to the discovery that some of the fertilizers were sub-standard, and subsequently the order was cancelled, thus saving the government from a huge loss of foreign exchange.

A comparison of the current stakeholder mapping of relationships and collaborations of NARS stakeholders (see Figure 3) with the situation before SCARDA (captured earlier in Figure 1) show growing collaborations, as represented by thicker lines among some of the NARS organizations. In particular, the relationship and collaboration between NARI and agribusiness has moved from very weak in 2007 to fairly strong. Similarly, the collaboration between NARI and policy makers as well as farmer groups have changed from weak in 2007 to strong in 2011.

Figure 3: Stakeholder Mapping of Interactions and Collaborations of the Gambia NARS After SCARDA (2011)



There is a need to continue to expand and deepen these relationships and collaborations for the NARS to effectively deliver on its mandate.

It was also noted that the few people from other NARS Institutions such as the University and Ministry of Agriculture who participated in some of the SCARDA training programmes reported an increase in knowledge and skills at the individual level. However there was no evidence that this translated into improving agricultural research and development activities of their respective organizations. This may be attributed to the limited involvement of these NARS Institutions at the beginning of SCARDA, resulting in lack of a sense of ownership and commitment to the programme. Moreover their participation in training was irregular and there was no provision of follow up mentoring support.

4.4 Tracking of progress

NARI did not have a well-defined internal monitoring mechanism for tracking progress being made. This may be attributed to the lack of an adequate overall monitoring and evaluation plan for SCARDA. Even though there was a logical framework designed to guide the Monitoring and Evaluation of programme implementation, there was limited capacity building of NARI to be able to effectively track the programme performance.

5.0 REMAINING THINGS TO BE DONE TO ACHIEVE THE SCARDA PURPOSE

The SCARDA interventions have generated significant outcomes as discussed above. However, the ultimate purpose of strengthening the NARS to deliver agricultural research outputs that can speed up the development process and contribute to poverty reduction in the Gambia has not been achieved. Even though a strong foundation has been laid in this direction, the short duration of the project implementation has left many critical activities incomplete as captured below:

- There is still shallow understanding and internalization of the agricultural innovation system linked to improving commodity value chains among the key stakeholders of the NARS. More initiatives in this direction in the form of short training workshops and integration of such ideas into the curricula of agricultural training institutions will be beneficial.
- There is still the on-going struggle between promoting self-interest rather than the organizational interest among staff at all levels, thus indicating the need to sustain and re-enforce the efforts towards internalizing the emerging positive attitudes such as business orientation, team work, accountability and transparency. The danger of lapsing back into the situation before SCARDA is very likely if there is no continuity in this direction.
- The SCARDA sponsored MSc graduates who have returned to NARI did not benefit from the management training even though some of them now occupy management and leadership positions as heads of programmes. It is important this new crop of scientists is equipped with the requisite managerial and leadership skills to enable them to function effectively in their new positions.
- Though there is evidence of growing partnerships and collaboration among some NARS organizations, they are still at a nascent stage and therefore need continued nurturing to mature.
- The institutional restructuring process initiated by NARI, which is expected to culminate in the development of a long term strategic plan, is incomplete. The development of a long-term strategic plan will position NARI to take advantage of emerging opportunities and effectively deliver on its mandate.
- Some of the Professional and Short term courses under the SCARDA programme were not carried out even though such trainings are considered critical for the overall effective performance of NARI.

6.0 CHALLENGES

A number of challenges which tended to limit the outcomes of the SCARDA project captured below:

- Too much bureaucratic processes in the release of funds at the inception of the project, thus leading to the delays in the implementation.

- Imbalance in the allocation of SCARDA resources in favour of knowledge and skills development to the neglect of provision for research equipment and facilities.
- Overcrowding of project activities in 2010.

7.0 LESSONS LEARNED

- A programme that involves attitudinal changes is a long-term journey that requires systematic and comprehensive training and follow up mentoring support.
- For a capacity building programme to be effective it should go beyond strengthening knowledge and skills to include provision of necessary equipment and facilities as well as the creation of an enabling environment to facilitate the effective application of the knowledge and skills.
- For mentoring support to be effective it must apply multiple methodologies such as face-to-face interactions, email, telephone, as well study visits.
- A project that requires partnership building and collaboration should involve all key stakeholders at the various stages of the project (i.e., planning, design, implementation, monitoring and evaluation).
- Bureaucracy and rigidity tend to limit the positives outcomes of the programme.
- Change management is a process which requires continuous learning and feedback into action towards the desired changes. It is therefore important to have specific indicators and targets to monitor progress and draw lessons to guide fine-tuning of the change management efforts.
- Anchoring the various SCARDA capacity building activities on a change management strategy enhanced the outcomes as participants were challenged to use the newly acquired knowledge and skills to deliver specific results or desired changes.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

The findings demonstrate that it is worth investing in capacity building for effective institutional change. However, such institutional changes which may involve significant shifts in mind-sets require a long term planning horizon as compared to the rather short duration of the implementation of the SCARDA activities.

The gains made by NARI and by extension, the NARS, under the SCARDA programme are in their early stages and are fragile, thus requiring continued support to consolidate.

It is quite evident that NARI is desirous to continue the change management process. Indeed they are in the process of developing a long term strategic plan which will incorporate both the unfinished businesses under SCARDA and other emerging strategic issues. However, the Institution does not have adequate financial resources to undertake all these on its own and would therefore require external support.

8.2 Recommendations

In view of the fact that the actual implementation of the SCARDA Programme was too short, resulting in the inability to complete all the planned activities coupled with the need to consolidate the gains made, it is recommended that a further period of support be provided.

The skewed allocation of SCARDA financial resources in favour of knowledge and skill acquisition at the expense of providing critical research equipment and facilities to enable the application of the acquired knowledge and skills during the training, limited the impact of the programme. It is therefore recommended that subsequent capacity building initiatives should seek to obtain a balance between the two.

Future interventions intended to use a focal institution to impact on the wider NARS should involve the key NARS organizations throughout the planning, design, implementation, and monitoring and evaluation stages in order to enhance the sense of ownership and commitment among all stakeholders.

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