

Institutionalizing IMPACT Orientation

Building a performance management approach that enhances the impact orientation of research organizations

National Banana Research Programme

Case study summary

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The Natural Resources Institute (NRI) of the University of Greenwich is an internationally recognized centre of expertise in research and consultancy in the environment and natural resources sector. The Institute carries out research and development and training to promote efficient management and use of renewable natural resources in support of sustainable livelihoods.

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- provide M&E solutions within complex environments
- offer innovative approaches in response to clients' changing information needs
- build clients' M&E capacity to help them meet emerging programmatic and organizational challenges.

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Introduction

This summary report presents the findings of a collaboration between the National Banana Research Programme (NBRP), NARO (Uganda) and NRI's Performance and Impact Programme (UK) in building a performance management approach to enhance organizational impact orientation.

As one of three collaborating institutes, the findings documented from NBRP's experience represent part of a larger initiative aimed at addressing the concern within public sector agencies of how to demonstrate their achievements in an environment of broad-based public policy reform. This pressure is particularly hard-felt by agricultural research organizations, where funders' perceptions of a lack of evidence for the uptake and impact of products and services are raising questions about their efficacy and existence.

In recognizing that the developmental impact of research is notoriously difficult to assess, the project is predicated on the belief that indicators of organizational uptake can provide reliable proxies, or 'leading' indicators of development impact. This implies that overcoming the lack of connection between research outputs and development impacts should not be pursued through impact assessment studies alone, but through appropriate systems that account for organizational uptake and research outcomes which provide the clearest evidence of likely developmental impact. Thus, building performance management capacity is about developing clear, meaningful and accountable measures of performance over which the actors have direct control, or a manageable interest.

This report summarizes the first phase of this project conducted inside NBRP: a diagnostic assessment of organizational context and capacity, followed by the initial steps of developing a performance management approach. The report is a supplementary to the main volume, which presents the process, lessons and outcomes across all three collaborating institutes.

Background to NBRP

The National Banana Research Programme (NBRP) is among the oldest and largest programmes of the National Agricultural Research Organization (NARO) of Uganda. It is located within the Kawanda Agricultural Research Institute (KARI), one of eight institutes within NARO.

NBRP's mandate is to conduct applied and adaptive (farmer participatory) research and promote technologies on bananas and plantains. The overall goal is to increase banana productivity and utilization through the development and promotion of technologies for integrated management of the banana enterprise. Analysis of stakeholder needs revealed that there is a need to develop and promote technologies for the prevention and management of pest build up and for increasing soil fertility in areas where production has declined. Therefore, the objectives of the programme are:

- to develop banana genotypes with resistance to weevils, fusarium wilt, black sigatoka, nematodes and bacterial wilt
- to evaluate and select foreign germplasm that is adapted to various ecological conditions and is acceptable to farmers and consumers
- to develop biological and cultural control technologies for the management of banana weevils and nematodes
- to accelerate the transfer/dissemination of technologies and information to farmers and other clients.

NBRP has 65 staff, of which 20 are senior researchers, 12 junior researchers, 21 technicians and 12 support staff. Staff work in multi-disciplinary teams on several projects simultaneously. The programme has a single manager who also functions as a research scientist. The manager's role is to supervise all programme staff, manage the finances and control staff promotion. Funding comes from a diverse array of donors, including the Government of Uganda, Rockefeller Foundation, IDRC, IPGRI and DFID. Projects funded by these donors

are increasingly targeted at solving specific problems, and moving away from a commodity-based approach.

Organizational diagnosis

This section presents the context and capacity of NBRP identified through organizational diagnostic exercises.

ORGANIZATIONAL CONTEXT

Under the auspices of the Programme for the Modernization of Agriculture, research and development in Uganda are currently undergoing considerable change. The newly formed National Agricultural Advisory and Development Service (NAADS) has in some districts replaced the conventional government extension service as a quasi-private entity to provide extension services to clients (predominantly rural farmers) through farmer fora. Funds are channelled to these fora via the devolved district administration, and former state-employed extension agents are hired by farmer fora as private contractors. The principle behind this privatization is that extension services should be demand-led, and this devolved system enables farmer fora to hire and fire self-employed extension agents on the basis of performance. NAADS is being introduced through a phased process and is currently at an early stage.

Along similar lines, a review of the national agricultural research system (NARS) is currently being carried out to consider what changes may need to be instituted to reorientate NARS so that it becomes more demand-driven. Central to this review is the current structure of NARO, and what changes may be appropriate to facilitate a service-orientated system, responding to the research needs of farmers. Proposed options from the first stage of the review are currently being considered by policy-makers and stakeholders within NARO. In addition to making research more demand-driven, the reform also seeks to liberalize the provision of research services so that it is more competitive. This implies that if the proposal is accepted, the monopoly of agricultural research by government institutions (NARO and Makerere University) will be broken, and opportunities will be competed for by both local and international research organizations.

In order to compete favourably in a liberalized environment, it is increasingly becoming apparent that NBRP must develop strategies for strengthening its internal ability as well as its image as a centre of excellence serving client needs. In anticipation of the recommendations of the NARS reform process, and in recognition of the need to be more demand-driven, one of NBRP's strategies is to sharpen its internal performance management system.

ORGANIZATIONAL CAPACITY

The diagnosis of organizational capacity was conducted through self-identification of institutional strengths and weaknesses, opportunities and threats followed by a review of the mandate, planning and performance structures and processes. Through this review process, the internal drivers and inhibitors are linked to perceived external opportunities and threats.

Internal strengths and weaknesses

The internal strengths and weaknesses exercise revealed the current state of the mandate, structure and processes within NBRP (Figure 1).

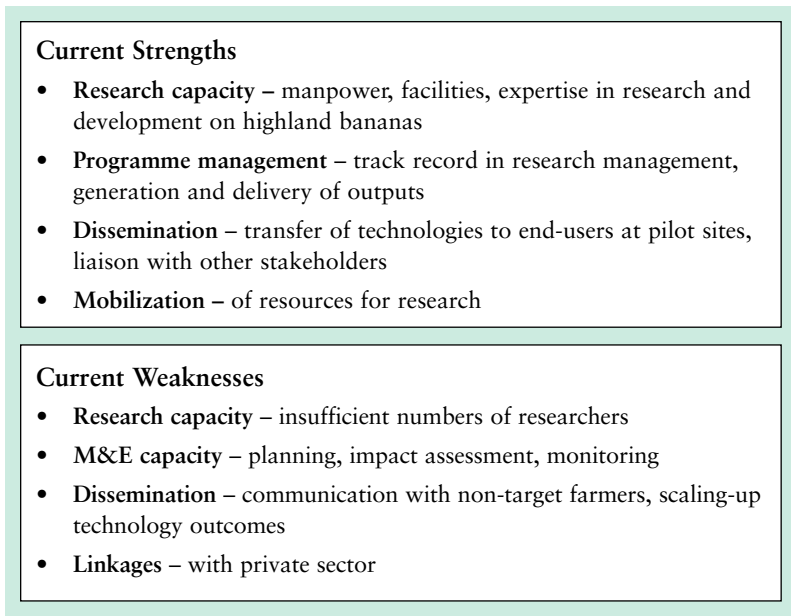


Figure 1 NBRP internal strengths and weaknesses

Organizational diagnosis

As Figure 1 illustrates, NBRP's self-identified strengths are centred in its research capacity, management and dissemination. However, the strength of NBRP's existing dissemination process is counter-balanced by perceived constraints in scaling-up outputs for a wider impact. This internal determination (and external pressure) to reach more farmers calls for other strategies, for example, linking up with other organizations/firms that engage in dissemination on a larger scale (extension service providers). This is supported by the finding that whilst linkages with farmers are strong, linkages with other clients (e.g. the private sector) are not.

Whilst programme management is identified as strong, internal systems for planning, monitoring and evaluation (M&E) (including impact assessment) were identified as currently weak. This suggests that whilst the NBRP is functioning effectively, to improve and expand its remit, attention has to be paid to improving the internal planning, feedback and impact monitoring systems.

External opportunities and threats

When viewed within the context of external opportunities and threats, the state of NBRP's position is made clearer. As Figure 2 shows, in spite of a considerable perceived demand for further research on bananas, both nationally and regionally, and NBRP's comparative advantage in this area, competition for research funds exists from other research areas in a declining pool of overall research funds. The implication of this finding is that NBRP needs to develop strong links with funders to ensure that banana research, and specifically NBRP, remains a high priority for funding.

Similarly, whilst the Government of Uganda recognizes the central importance of bananas and banana research to the country, there are fears over shifts in policy regarding the way in which public research is organized, particularly in view of the privatization of the extension service. Consequently, NBRP needs to be aware of potential shifts, engage in policy debate, and position itself in the most effective way to continue to thrive as a research programme.

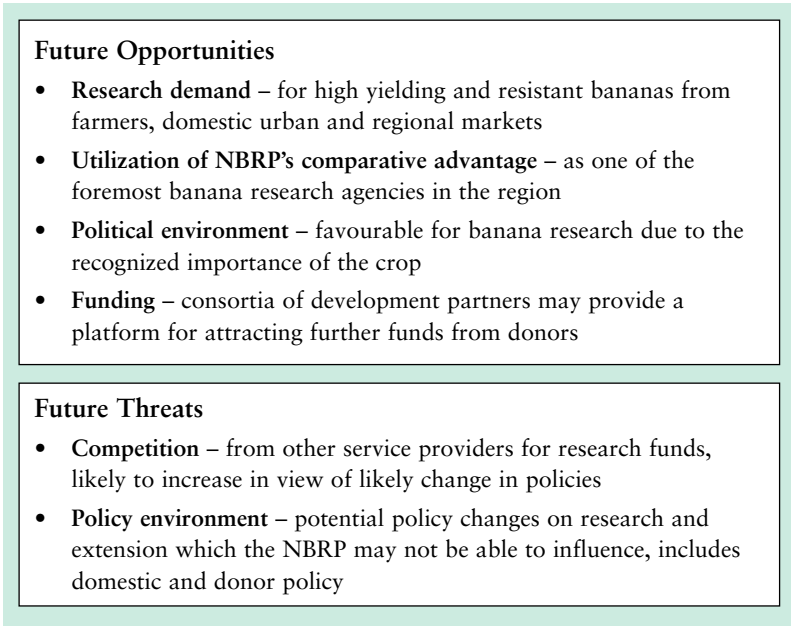


Figure 2 External opportunities and threats for NBRP

Client and stakeholder links

A mapping exercise was conducted to look at the type and strength of linkages that NBRP has with clients and its other stakeholders (Figure 3). This was conducted in response to the recognition that the majority of issues arising from the institutional assessment related to external agents. Unlike the other case study organizations (FRI and CRI), no distinction was made between clients and stakeholders¹, but will need to be considered when developing indicators and delivery plans due to variations in the products and services produced according to client/stakeholder group.

As Figure 3 illustrates, NBRP has numerous clients and stakeholders, ranging from researchers to business operators. Despite strong linkages with farmers and extension workers, it was recognized that these links need to be further strengthened as key clients of NBRP products and services, and considerable progress must be made in strengthening the links with consumers and the agri-business community/private sector with whom links are currently weak.

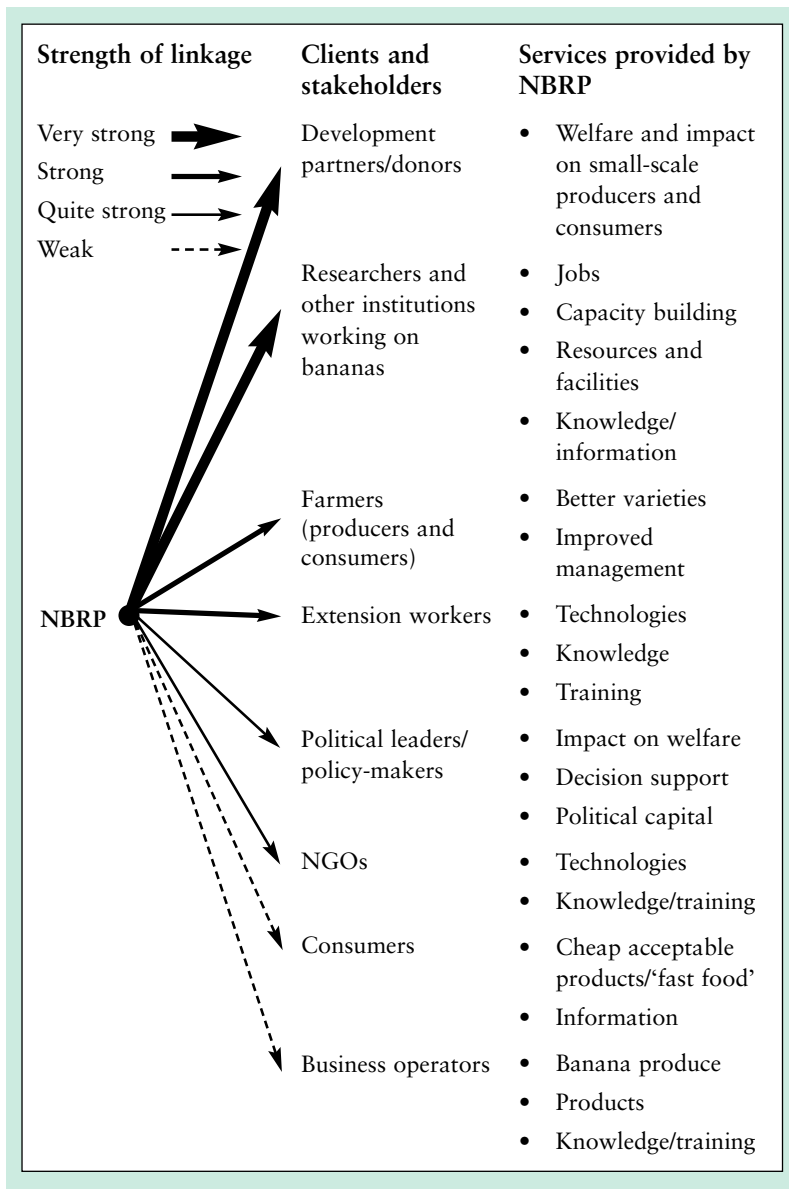


Figure 3 NBRP linkages with clients and other stakeholders

Whilst strong feedback mechanisms with end-users (farmers) have enabled NBRP’s research to be increasingly demand-focused, these clients are not those directly determining policy and institutional

change. In this sense, it is a necessary, but on its own, insufficient condition for improving the standing of the NBRP. Improving relationships with these client and stakeholder groups was identified as crucial to better understanding their needs and thus improve the effectiveness and efficiency of NBRP resource use and the production of more relevant outputs. Monitoring and evaluation was perceived to have a role in this process through tracking progress towards improved service delivery.

Amongst the client and stakeholder groups identified, NBRP's parent institution – the National Agricultural Research Organization (NARO) – was noticeably absent. This reflects the relative autonomy of NBRP in its fund-raising and activities, but perhaps suggests the lack of an effective interface which is crucial if NBRP is to continue to position itself effectively with the institutional environment.

Monitoring and Evaluation

NBRP's capacity in M&E was diagnosed using exercises to reveal the staff's knowledge and perception of M&E within the organization.

Brainstorming on M&E: A brainstorm session on what constitutes good M&E (intentionally left undefined) highlighted various issues which have been grouped into what good M&E might do, what it might involve and how it might be done. Further, a number of potential M&E needs were identified (Figure 4).

Good M&E was perceived as having a role in planning, tracking progress, aiding financial management, and improving service delivery. It was noted that in particular, strong M&E may provide a guide to solutions in difficult (emergency) situations.

The constituents of good M&E were identified as monitorable indicators designed through the participation of relevant stakeholders. Effective training, data analysis and processing were seen as central to the implementation of M&E. The institutionalization of a system, designed specifically for NBRP and with standardized data collection instruments, was identified as the M&E need of the programme.

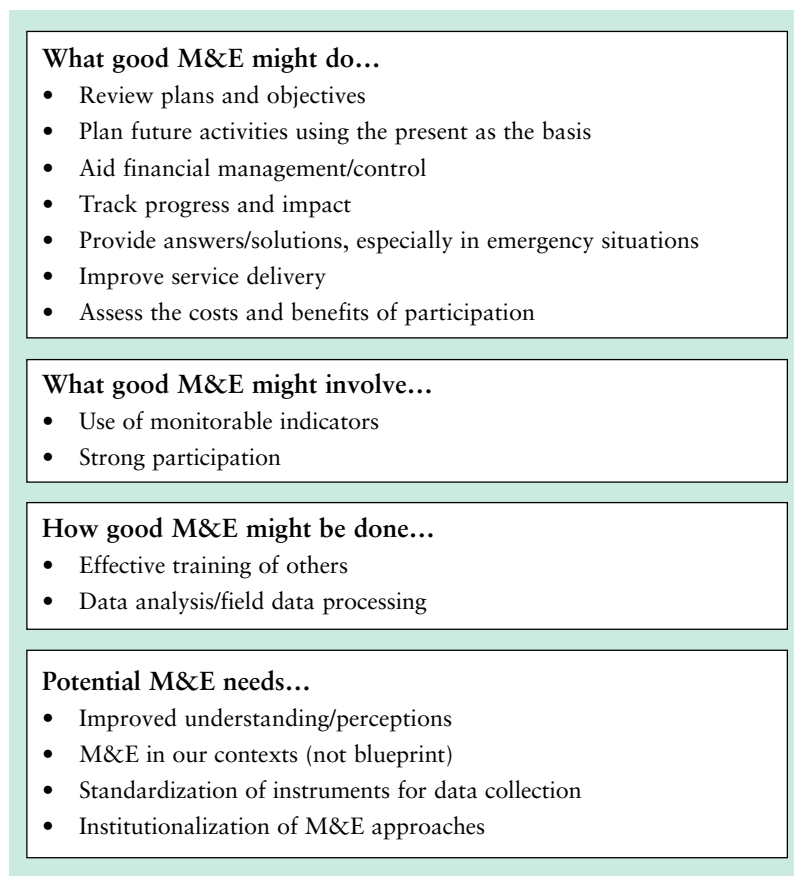


Figure 4 M&E brainstorm

Diagnosing M&E capacity: A self-assessment diagnosis was carried out by each staff member based on rating a series of ‘positively orientated’ statements from ‘strongly disagree’ to ‘strongly agree’ in the context of NBRP (Table 1).

The results of the self-assessments were accumulated and grouped into three categories: the M&E system, internal focus and external focus. Where the majority of responses were positive, these were considered ‘strengths’, where negative, they were considered ‘weaknesses’. Where opinion was split, a third category was formed (Figure 5).

Table 1. Monitoring and evaluation capacity self-assessment



Note: The results focused only on the positive and negative responses to the statements, omitting the 'neither agree nor disagree'. In discussion, and through reviewing the explanatory comments made on the self-assessment forms, it was recognized that in many cases those who marked as such did so because they did not fully understand the statement.

Strengths	Weaknesses
<p><i>M&E system</i></p> <ul style="list-style-type: none"> • The system does give the right information, when it is needed • The system was developed with a plan in mind, rather than evolving by chance • The system does provide a well-balanced set of measures reflecting different levels of objectives in the strategic plan • Outputs are easily summarized 	<p><i>M&E system</i></p> <ul style="list-style-type: none"> • The system does not measure the right things • The system produces more paperwork than is necessary
<p><i>Internal focus</i></p> <ul style="list-style-type: none"> • Accountable only for the measures under control of NBRP • Acts on results quickly • Results from the system inform budgetary decisions 	<p><i>Internal focus</i></p> <ul style="list-style-type: none"> • Not everyone in the organization understands the measures used to assess performance
<p><i>External focus</i></p> <ul style="list-style-type: none"> • Measures (indicators) are defined from the communities (clients) point of view • Assess client satisfaction with the outputs delivered with and for them reflecting good linkages and understanding of client needs • Track performance for internal operations as well as the delivery of outputs 	
<hr/> <p>Split opinion (between relative strengths and weaknesses)</p>	
<p><i>Internal focus</i></p> <ul style="list-style-type: none"> • Whether or not responsibilities for assessment are clearly defined • Whether or not as much attention is paid to non-financial measures as financial ones 	

Figure 5 NBRP current strengths and weaknesses in monitoring and evaluation

Having compiled the results, the following key issues were highlighted and discussed.

The M&E system: Three-quarters of the statements about positive aspects of an M&E system were identified by senior staff as being true for NBRP: the system was designed rather than evolved, tracking both internal and external operations, providing timely information that is easily summarized, and used to make budgetary decisions. However, whilst recognizing that the system serves a useful purpose, it was also felt that there are gaps in what it measures. The majority of staff² noted that the system is either not sufficiently broad in its coverage of indicators that are useful in providing information about the performance of the programme, or that a number of indicators used are redundant, and thus time-wasting³. This latter interpretation may be supported by the view that more paperwork is produced than is necessary as a consequence of reporting on indicators.

Understanding and use: Some confusion was evident in the understanding and use of measures (or indicators) within the M&E system. Whilst 100% of staff felt that measures are not clear for assessing performance, it was unclear as to whether or not this was referring to individual staff performance, or the performance of the NBRP itself. Allowing for this, it was still acknowledged that lack of clarity on programme performance measures reflects the view noted previously, that the system is not necessarily measuring all of the right things. In terms of individual accountability, referring primarily to measures related to the research process, it was felt by most that they were only expected to measure (and thus be assessed on) what is under their direct control. Further, the measures used do enable them to act quickly on the results.

Nature of measures: Opinion was split over whether the measures in the system reflect a financial and non-financial balance. This contrasts to a belief that the system as a whole contains a balance of measures. Further investigation is required to better understand this apparent contradiction.

External focus: linkages with clients: Strong client and stakeholder linkages (identified through the mapping exercise) are supported by

Organizational diagnosis

strong feedback mechanisms with these same groups (notably farmers). It was shown in the M&E diagnosis that the majority of staff believe that measures are defined from the clients' point of view, and that client satisfaction is assessed.

SUMMARY OF DIAGNOSIS

NBRP is performing strongly as one of the larger programmes within NARO. High quality staff, a flexible and responsive structure, strong systems and a broad funding base have enabled it to operate with reasonable autonomy as a public entity.

However, changes in NBRP's institutional environment have affected the programme in several ways. The privatization of extension services, and increasing pressure on research impact has forced the programme to consider expanding its boundaries along the research-extension continuum. Conducting research in several pilot areas is no longer considered sufficient to have an impact on banana production in Uganda, and thus it has been recognized that it is crucial for NBRP to determine its relationship with new extension actors (or the same actors under a new system), and the implications this may have in terms of its own extension role. Secondly, the research system itself is currently under consideration, and this has created a need for the programme to be clear as to how it can best position itself to retain its high profile status as a front-running banana research institution.

These shifts in NBRP's institutional environment have important implications for performance management within the programme. Gaps identified in the existing M&E system reflect these external shifts. There is an identified need for clear programme objectives, and effective monitoring and feedback mechanisms that enable the internal research and staff processes to learn and adapt to the demands of the client base, and the shift in funding patterns.

NOTES

¹ CRI and FRI defined clients as those for whom they provide a direct service, whilst other stakeholders are those with whom they have some form of linkage.

²Twelve senior scientists participated in the M&E diagnostic self-assessment exercise (representing 60% of NBRP's senior staff).

³It should be noted that discussions held after the exercise revealed that some staff felt that other staff members may not have considered the various 'informal' M&E activities within the context of this issue.

Scorecard construction

Scorecard construction took place during a workshop held in Ghana in July 2002. A series of exercises was carried out through the workshop to build performance management systems within the context of the balanced scorecard approach. This involved reviewing the corporate goal and building sub-systems around the four perspectives of the scorecard: employee, internal business, client/stakeholder and financial. Review, consultation and construction of the performance management sub-systems for each perspective drew heavily on the findings of the organizational diagnosis. The results of these exercises for NBRP are described below.

ESTABLISHING THE PROGRAMME'S GOAL

A strong performance management system relies upon a shared understanding of a common goal. It was, therefore, considered essential early in the Stage I diagnostic needs assessment to ascertain whether or not a jointly held goal exists. This was achieved through an exercise to review individual staff's understanding of the programme's goal, how activities contributing to this goal are planned, what information is used, and how it is used. Through combining and comparing individual responses, an indication of consistency (amongst the tools used) and attribution (i.e. whether or not the planning processes accurately reflect their contribution to the goal) was sought. This exercise emphasized planning when conducted with NBRP, but was altered for CRI and FRI. During the Stage II workshop, NBRP representatives reviewed these findings as a basis for revising their programme goal.

Revisiting the programme's goal: Differences in individuals' understanding of the goal of NBRP reflected differing understanding of the term, and differing expectation of what the programme may be able to achieve. This ranged from developing, testing and disseminating banana technologies, to increasing the welfare (food security and income) of farmers through increased banana production.

The variation in perceptions of the goal highlighted the issue of what can be directly managed by, and attributed to, the activities of the programme. It was recognized that whilst the programme's activities can contribute towards increased farmer welfare, it is not solely responsible for, nor can it be held accountable for this. In contrast, conducting and disseminating research are directly within the programme's mandate.

Individuals' contribution to the goal: Individuals' perception of their contribution to the programme's goal was also assessed through the same exercise. Some individuals found it difficult to distinguish between describing what they do (i.e. their day-to-day activities) and how what they do contributes to the overall goal of the programme. Whilst this may reflect a misunderstanding of the task (identifying contribution), it may also reflect lack of a sense of mission, i.e. what is the individual's contribution to an overall goal.

The breadth of individual contributions to the programme's goal (from investigative design studies to technology dissemination) is reflected in the planning tools used. With the primary *modus operandi* being farmer participatory research (FPR) (in the case of NBRP), it is unsurprising that the majority of planning tools begin with an understanding of farmer needs and perceptions, followed by team planning and research protocol development. Whilst this approach is justifiable, the implication is that FPR is used at the behest of a more balanced set of planning tools which reflect not only farmer needs, but internal capacity and requirements, and those of other stakeholders. For example, while stakeholders were mentioned as being included during planning processes, little emphasis was placed on the specific role of extension services or other intermediaries who are ultimately responsible for the dissemination of the products and services produced. Thus, an imbalance exists between investigating end-user (farmer) needs on the one hand, but not engaging as fully with stakeholders responsible for dissemination (extension services, public and private agencies) on the other.

Further, the planning process described on an individual level highlighted the structural role of the project through which research is conducted. The lack of a clear overarching goal through which

projects are aligned suggests that planning starts and ends within these project loops, thus not explicitly contributing to a higher level objective.

Whilst this may be sustainable on a project level, it does not provide the organization with a clear direction through which targets can be established and measures used to assess achievement. In the absence of organization-level processes, there is less obvious space through which lessons can be learnt from project success and failure as a basis for future resource allocation.

Revising the programme's goal: Through this exercise, it was recognized that NBRP needed to reconsider its goal, how individuals' outputs directly contribute to this goal, and how best these contributions can be assessed. The perceived benefit of conducting an exercise was to get a common sense of purpose, improved understanding of others' work areas, and where the linkages exist between work areas.

Through a group-based review of the various individual perspectives, and the use of guidance material, consensual agreement was reached:

National Banana Research Programme Goal

Lead agency developing and promoting technologies for increasing banana productivity and utilization options for the benefit of producers and consumers.

DEVELOPING DELIVERY PLANS UNDER THE SCORECARD PERSPECTIVES

Delivery plans were developed by NBRP for two of the four scorecard perspectives. The exercises followed (detailed in main volume) led the NBRP team through a five-part methodology: formulating objectives for each perspective; identifying key performance indicators for each perspective; reviewing existing M&E activities under the priority objectives; identifying critical success factors; and developing draft delivery plans. The results of this process are presented per scorecard perspective.

Developing the employee perspective

How can we continue to improve and create value?

Clarifying or defining objectives in this perspective involved reflecting on the performance of internal employee-related processes that drive the organization, including forward-looking targets for continual improvement. Without employee ‘buy-in’, NBRP’s achievements are likely to be minimal. This is of particular relevance in an environment where (i) other agencies (e.g. universities and NGOs) are attracting able employees away from the public sector to potentially more lucrative jobs, and (ii) where donors are looking to invest in attractive, growing organizations.

A number of key issues were identified from the organizational diagnosis.

- Good quality, technically proficient staff were identified as one of the key strengths of NBRP. The main problem identified was insufficient staff capacity to conduct the research.
- If NBRP is to continue to strive to be the front-running institution in banana research, it is crucial that it retains its staff, its self-identified most valuable resource.
- A lack of consistency in understanding was highlighted in the self-assessment exercise, with individuals unclear about the measures used to assess performance. Whilst the promotion process is clear, the measures used to assess institutional performance (and thus a sense of common purpose) are not.
- Central to this is a clarification of purpose, strengthened by good communication between staff and a feeling of self-worth. Identifying and illustrating the achievements of individuals, and how their work relates to the work of others in view of the goal of the institute will help to achieve this.

Figure 6 illustrates the objectives and key performance indicators developed by NBRP.

Staff motivation was not identified as an internal weakness within NBRP during the diagnostic exercises. However, when considered alongside the weaknesses identified within the M&E system (lack of

Objective	Key Performance Indicator
1. Motivated staff	<ul style="list-style-type: none"> • Staff turnover • Percentage of staff reporting > average job satisfaction • Minutes of staff meetings • Number of staff achieving targets (and reasons) • Level of attainment of projected NBRP outputs • Number of staff recognized or awarded prizes • Level of staff benefits relative to similar organizations
2. Increased quantity, quality and accessibility of resources	<ul style="list-style-type: none"> • Difference between funds required and amount disbursed in a given period • Number of staff accessing facilities when needed • Percentage deficiency in required research facilities • Level of resources accessible per staff • Number of facilities meeting international standards • Facilities acquired per year
3. Improved human resource capacity to meet demand	N/A

Figure 6 Employee perspective

coherent and consistent understanding of measures used to assess performance), it was felt that significant steps could be taken to develop and institutionalize a learning-based system for assessment and feedback on staff motivational issues. As the draft delivery plan (Plan 1) for this objective illustrates, a step-wise approach (inputs-process-outputs) has been taken which maps a clear pathway for achieving an effective system.

Plan 1 Draft delivery plan for employee perspective at NBRP (1)					
Level	What are we already doing?	Positive experiences of M&E of performance in this area?	To achieve this objective, what has got to happen (critical success factors)?	By when?	By whom?
Objective	Motivated staff				
Key performance indicators	Staff turnover; percentage of staff reporting > average job satisfaction; minutes of staff meetings; number of staff achieving targets (and reasons); level of attainment of projected NBRP outputs; number of staff recognized or awarded prizes; level of staff benefits relative to similar organizations				
Outputs	<ul style="list-style-type: none"> ■ Improved staff motivation ■ Feedback on staff motivation issues 	<ul style="list-style-type: none"> ■ Motivation improved ■ Improved communication ■ Staff turnover is low 	<ul style="list-style-type: none"> ■ Staff job satisfaction measured ■ Motivation measurement framework developed ■ Improved understanding of factors affecting staff motivation 	<ul style="list-style-type: none"> Oct 2002 Dec 2002 Jul 2003 	<ul style="list-style-type: none"> Personnel, core team Core team Core team
Processes (activities)	<ul style="list-style-type: none"> ■ Staff meetings ■ Staff evaluation reports (annual) ■ Monitoring timeliness of responses to staff needs ■ Co-ordinated assessment of training needs and planning ■ Verbal feedback on individual staff needs ■ Follow-up discussions with groups and individuals 	<ul style="list-style-type: none"> ■ More feedback obtained through individual interaction ■ Staff training needs identified ■ Response to staff needs/ requests improved 	<ul style="list-style-type: none"> ■ Conduct job satisfaction surveys ■ Implement suggested quality improvement plan ■ Design methodology and measurement standards ■ Develop an incentive system ■ Develop proposal for improving motivation ■ Identify areas for improving staff motivation 	<ul style="list-style-type: none"> Annually Jul 2003 May 2003 Mar 2003 Oct 2002 Sep 2002 	<ul style="list-style-type: none"> Personnel office Management Management, core team Management Core team All staff
Inputs	<ul style="list-style-type: none"> ■ Staff time ■ Salaries and allowances ■ Facilities 	<ul style="list-style-type: none"> ■ Salaries and payment system improved 	<ul style="list-style-type: none"> ■ Staff time increased (20 man days) 	<ul style="list-style-type: none"> 2003 	<ul style="list-style-type: none"> Management
Are we doing the right things?					
Are we doing things right?					

Plan 2 Draft delivery plan for employee perspective at NBRP (2)		By whom?	
Level	What are we already doing? Positive experiences of M&E of performance in this area?	To achieve this objective, what has got to happen (critical success factors)?	By when?
Objective	Increased quantity, quality, and accessibility of resources		
Key performance indicators	Difference between funds required and amount disbursed in a given period; number of staff accessing facilities when needed; percentage deficiency in required research facilities; level of resources accessible per staff; number of facilities meeting international standards; facilities acquired per year		
Outputs	<ul style="list-style-type: none"> ■ Resources more efficiently utilized ■ Accessibility by staff improved 	<ul style="list-style-type: none"> ■ MIS developed ■ Resource utilization plan developed ■ Quality improvement needs identified 	<p>Jul 2003 Mar 2003 Oct 2002</p> <p>Management and staff Core team Management and staff</p>
Processes (activities)	<ul style="list-style-type: none"> ■ Reports – allocation committees, etc. ■ Minutes of staff meetings ■ Disbursement and accounting system ■ Fault reporting and rectification system ■ Control systems – stock, budget, etc. ■ Resource catalogue 	<ul style="list-style-type: none"> ■ Interpretation and utilization of feedback/results by management and staff ■ Collect and analyse data ■ Develop and implement the MIS ■ Discuss and prepare a proposal for an MIS to improve resource management ■ Develop resource management plan ■ Review and identify critical issues in identifying and addressing resource availability and needs for staff 	<p>Sep 2003 Jul 2003 Oct 2002 Sep 2002</p> <p>Core team Management and staff Management and staff Core team All staff</p>
Inputs	<ul style="list-style-type: none"> ■ Staff ■ Computers ■ Facilities 	<ul style="list-style-type: none"> ■ Availability improved ■ Planning improved 	<p>2003</p> <p>Management</p>

The quantity of resources available to NBRP was identified in the diagnosis, notably the deficit of researchers. As it has been acknowledged that not all of the issues regarding this constraint have been considered, the draft delivery plan developed (Plan 2) is based around an initial diagnosis of critical issues. As with the ‘staff motivation’ delivery plan, a step-wise approach has been taken which presents a clear map to achieving the objective.

The building of a performance management delivery plan to address these two objectives focused on identifying what is currently being done by NBRP in these areas and, within this context, considering critical factors to ensure the success of the objectives in question, and thus the organization’s goal. Implementation of the delivery plans will result in systems that should provide active information to guide planning and budgeting.

Developing the internal business perspective

To satisfy our clients, at what internal business processes should we excel?

The objective of this perspective is to link the client/stakeholder perspective with the internal actions and perspective of those responsible for meeting contractual obligations and fulfilling mandates. A number of issues were identified during the diagnosis which NBRP representatives considered in developing the delivery plan for this perspective.

- Whilst the research process is strong, the environment in which it is operating is changing. Although NBRP has adapted faster than many other programmes and institutes in terms of its work with end-users (farmers), through farmer participatory research, the considerable changes in the extension service and a shift towards engaging with other intermediate users (e.g. industry) require continual internal adaptation.
- The shifts that have already taken place have questioned the existing M&E system within the programme. Some conflict over the measures used to assess performance, and whether or not the right things are being measured, were diagnosed as potential failings within the current system.

Scorecard construction

- In terms of NBRP's relationship with its client base, an imbalance was identified between the importance attached to identifying the needs of farmers, on the one hand, and understanding and being able to respond to the needs of other intermediate stakeholder groups on the other.

Figure 7 illustrates the objectives and key performance indicators developed by NBRP. The selection of four objectives shows the importance placed on this perspective of the scorecard by senior staff.

Increased client participation in the research process (objective 1) and the associated performance indicators highlights the importance of identifying each client group, recognizing and engaging each as appropriate. Several delivery plans (or sub-plans) may need to be developed for this objective, mapped together to clarify the pathways

Objective	Key Performance Indicator
1. Increased client participation in the research process	<ul style="list-style-type: none">• Number and type of clients participating in the research process• Quality of client contributions to the research process disaggregated by client group
2. Ability to identify and exploit available opportunities	<ul style="list-style-type: none">• Human resource capacity• Quality and quantity of available information on opportunities• Number and strengths of linkages
3. Enhanced communication with clients	N/A
4. Enhanced capacity to compete	N/A

Figure 7 Internal business perspective

between NBRP and each client group, and between each client group to identify where relationships and responsibilities lie.

The emphasis of the other three objectives developed under this perspective reflect the realization that NBRP is increasingly being thrust into a competitive environment, not necessarily within the banana sector, but against other research programmes/institutions within a declining overall pool of resources. The greater (and stronger) the linkages and feedback mechanisms, the better the chance that the programme stands of being considered a repository for research funding.

No delivery plans were developed for this perspective due to the time constraints during the workshop.

Developing the client/stakeholder perspective

How do we appear to our clients?

This perspective considers the organization's performance through the eyes of a client or stakeholder, so that the institution retains a careful focus on client or stakeholder needs and satisfaction.

The diagnosis revealed that NBRP has several client groups and stakeholders. Links with these groups vary from very strong (farmers and donors) to weak (consumers and industry). This is reflected in the planning process, with farmers directly involved in the planning of activities, but with few other clients and stakeholders mentioned. In view of these findings, several issues were highlighted.

- There appears to be an opportunity for NBRP to better position itself with respect to its clients and stakeholders.
- Whilst strong feedback mechanisms with end-users (farmers) have enabled NBRP's research to be increasingly demand-focused, these clients are not those directly determining policy and institutional change. In this sense, it is a necessary but, on its own, insufficient condition for maintaining the standing of the programme.
- There needs to be some consideration of how NBRP relates to its weaker linkages, i.e. consumers (what role do consumers play, and how should NBRP interface with this group?), and industry (as a potential future client base and collaborator in research).

- Improving relationships with these client and stakeholder groups was identified as crucial to better understanding their needs and thus improved effectiveness and efficiency of NBRP resource use and the production of more relevant outputs. Monitoring and evaluation was perceived to have a role in this process through tracking progress towards improved service delivery.

In considering what needs to be done to improve client/stakeholder linkages, NBRP developed two objectives: an ‘implementation’ objective, and a related ‘M&E’ objective (Figure 8). This dual objective recognizes that the aim of this project is to enhance performance management, which in turn, should lead to improved performance. Thus, the key performance indicators selected relate

Objective	Key Performance Indicator
<p>1. 1. NBRP satisfactorily solves clients’ problems and contributes to improving their quality of life</p> <p>(M&E-linked objective) Better understanding of clients’ satisfaction with products and services</p>	<ul style="list-style-type: none"> • Score of level of client satisfaction • Extent to which major problems are solved • Timeliness of interventions or services for expressed needs • Number and nature of complaints and compliments in a given period • Number of clients using products and services • Types and numbers of clients receiving/using products and services • How NBRP contributes to the household income • Level of awareness of prevailing constraints and solutions • Number and nature of problems not addressed

Figure 8 Client/stakeholder perspective

primarily to the M&E objective, which utilized effectively should lead to the achievement of the ‘implementation’ objective.

The high number and broad range of performance indicators selected by NBRP reflects the complexity and importance attributed to this perspective. The majority reflect the level of understanding of client satisfaction with product and service quality and delivery, but some also refer to the impact that these have. The extent to which all of the key performance indicators are needed or are useful for different client groups requires further attention (e.g. the nature of satisfaction, and the ability to ascertain it, are clearly different when comparing farmers with industry). The complexity is compounded by the fact that the objective formed, and the key performance indicators selected, refer only to clients, with a different (although related) set required for stakeholders.

The development of a draft delivery plan for this objective (Plan 3) reflected NBRP’s own interpretation and adaptation of the process. In consideration of what they are already doing, focus was placed on the M&E-linked objective, thus illustrating the consultations, reviews and surveys currently conducted with clients. ‘Positive M&E experiences’ were interpreted literally, with the identification of the positive impact of existing processes. The identification of factors critical for the success of the objective is presented through a clear input-output framework, starting with a review of existing procedures, the development of tools for assessing client satisfaction, pilot testing, analysis and then expansion.

Implicit within addressing this perspective is the need to delineate major clients, both current and those likely in the near future. This implies some form of stakeholder analysis. Subsequently, the nature of the tools developed for assessing and testing client satisfaction will vary accordingly, and thus this perspective may consist of a series of performance indicators relating to different client and stakeholder groups. There may be value in considering an overarching approach through which to address client and stakeholder needs in a consistent manner.

Plan 3 Draft delivery plan for client/stakeholder perspective at NBRP

Level	What are we already doing?	Positive experiences of M&E in this area?	To achieve this objective, what has got to happen (critical success factors)?	By when?	By whom?
Objective	<p>NBRP satisfactorily solves clients' problems and contributes to improving their quality of life (M&E-linked objective) Better understanding of clients' satisfaction with products and services</p>				
Key Performance Indicators (see Figure 8)					
Outputs	<ul style="list-style-type: none"> ■ Greater exposure of products and services ■ Evaluation of products by clients ■ Product promotion and improvement strategy 	<ul style="list-style-type: none"> ■ Product popularity is increasing ■ Demand exceeds supply ■ Needs of clients increasingly better understood 	<ul style="list-style-type: none"> ■ Client satisfaction determined ■ Framework to address issues related to client satisfaction ■ Proposal approved 	<p>Sep 2003 Mar 2003</p> <p>Oct 2002</p>	<p>Post-harvest and marketing team</p> <p>Core team</p> <p>Core team</p>
Processes (activities)	<ul style="list-style-type: none"> ■ Bi-annual review/consultative meeting with clients ■ Continuous surveys to evaluate products and services ■ Bi-annual follow-up visits after feedback ■ Continuous monitoring and studying client participation in product development ■ Continuous review and interaction ■ Internal review and planning meetings (whenever required) 	<ul style="list-style-type: none"> ■ More clients getting involved in product design process ■ Voluntary participation is increasing ■ Follow-up visits are very important to promote interest and action 	<ul style="list-style-type: none"> ■ Pilot, then expand framework ■ Formulate a framework that addresses key client issues ■ Analyse results of test ■ Collect data ■ Develop tools for identifying clients and testing satisfaction ■ Develop proposal ■ Review existing procedures relating to M&E of client satisfaction (e.g. field surveys, visits, etc.) 	<p>May 2003 Mar 2003</p> <p>Feb 2003 Jan 2003 Dec 2002</p> <p>Oct 2002 Sep 2002</p>	<p>NBRP, pilot clients NBRP, pilot clients</p> <p>Core team All scientists Core team</p> <p>Core team All scientists Scientists, pilot clients</p>
Inputs	<ul style="list-style-type: none"> ■ Increased staff time for on-farm research/outreach ■ Increased participation and facilitation of extension staff ■ Free samples distributed 	<ul style="list-style-type: none"> ■ Increased resources spent on testing, promotion of products and services 	<ul style="list-style-type: none"> ■ Increase budget for monitoring client satisfaction by 50% 	<p>2005</p>	<p>Management</p>

Are we doing the right things?

Are we doing things right?

Financial perspective

To succeed financially, how should we look to donors, government and investors from the corporate sector?

Despite considerable perceived demand for further research on bananas, both nationally and regionally, and NBRP's comparative advantage in this area, there is competition for research funds from other research areas in a declining pool of research funds. Similarly, whilst the Government of Uganda recognizes the central importance of bananas and banana research to the country, there are potential shifts in policy regarding the way in which public research is organized, particularly in view of the privatization of the extension service.

In attempting to resolve these constraints, the following issues were highlighted.

- It is necessary for NBRP to develop strong links with funders to ensure that banana research, and specifically NBRP, remains a high priority for funding.
- Consequently, NBRP needs to be aware of potential shifts, engage in policy debate, and position itself in the most effective way to continue to thrive as a research programme.
- There is a need for a corporate framework/basis with which to help NBRP staff as well as its investors better understand its overall performance and impact as an institution if it is to attract funding on a more equally defined basis (e.g. mechanisms for providing feedback to government about how its policies affect the work of NBRP and its commercialization drive).

Figure 9 illustrates the objectives and key performance indicators developed by NBRP in the financial perspective.

The objectives developed under the financial perspective reflect the awareness that not only is a broad spectrum of funding sources needed, but that to maintain high levels of funding, the fiscal integrity of the programme must be demonstrable and demonstrated. A performance delivery plan has yet to be developed for this perspective.

Objective	Key Performance Indicator
1. Diversify funding base	<ul style="list-style-type: none"> • Number of funding sources • Types of funding sources • Level of funding
2. Efficient utilization of funds	<ul style="list-style-type: none"> • Satisfaction of investors and donors • Cost of completing activities/milestones in given period of time • Achievement of stated objectives of financial management process

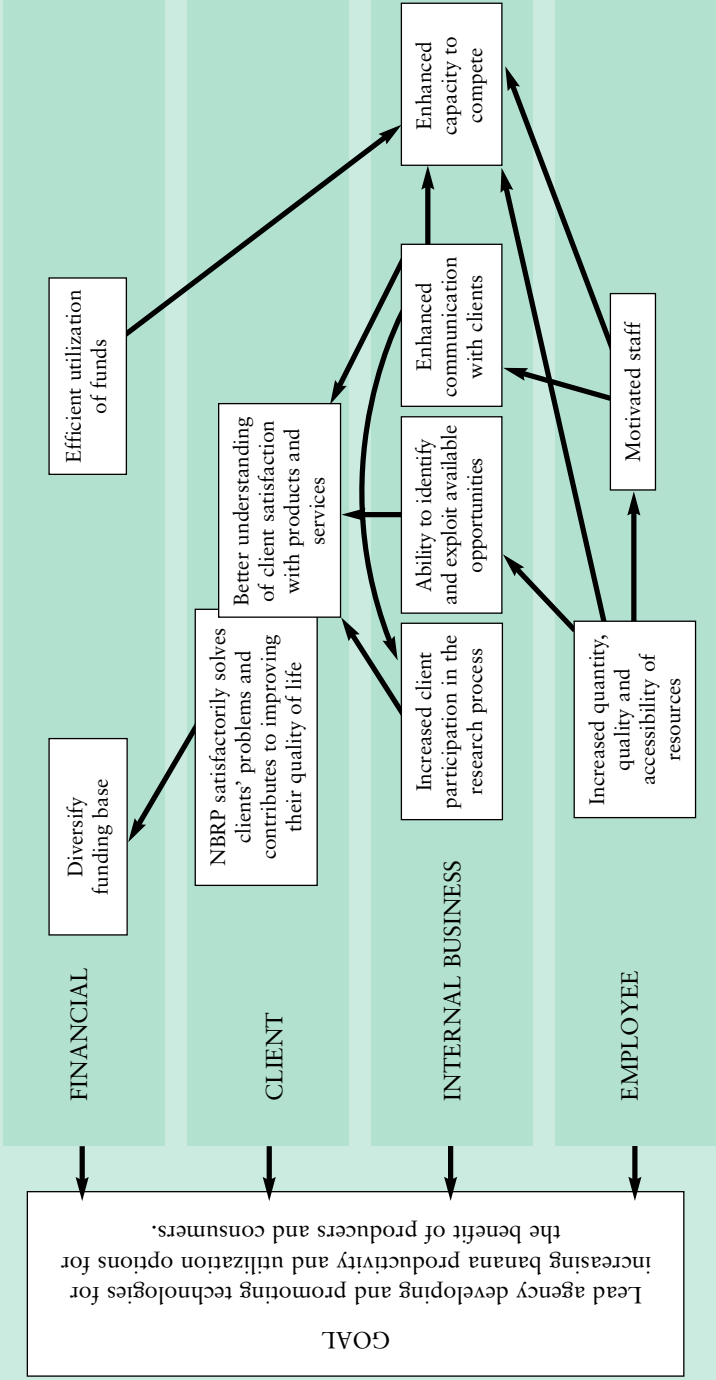
Figure 9 Financial perspective

MAPPING OBJECTIVES

The strength of the balanced scorecard approach lies not only in the consideration of independent perspectives of organizational performance, but also in the interdependence of these perspectives and their contribution to the organization’s goal. The mapping of objectives – looking at cause-and-effect relationships – visualizes how the objectives are linked.

An objective-mapping exercise was conducted at the end of the workshop using CRI as an example of how cause-and-effect relationships can be analysed and charted. The map (Figure 10) is a first attempt at identifying some of these cause-and-effect linkages at the objective level for NBRP. As Figure 10 illustrates, numerous assumptions link the objectives from the lowest level of the scorecard – the employee perspective – up to the fourth tier – the financial perspective: namely that if staff are motivated they are more likely to develop better links (communication) with clients. This in turn will increase client participation in the research process and give NBRP a better understanding of client satisfaction with its products and services. In turn, this will give NBRP the knowledge on which to solve client problems, and should strengthen (diversified base) the financial position of the programme through evidence of successful impact.

Figure 10 Mapping objectives across the perspectives – National Banana Research Programme



The strength of this exercise is evident in determining which objectives are most central to the programme's performance, i.e. which are both measuring something fundamental to performance on their own, and fit within the broader framework of objectives for the programme. In the case of NBRP, the M&E-linked objective of 'better understanding of client satisfaction' needs to be considered in this light. Where objectives link less well, there are grounds for considering whether or not they provide crucial information on programme performance.

To further this investigation, Figure 11 presents a partial picture of the objectives mapped, including the key performance indicators. Whilst this example is simplistic in its assumptions and the linear nature of the linkages, its aim is to consider cause-and-effect relationships across the perspectives. When reviewing the objectives in this linked fashion, the strength of the objectives themselves – both inter-connectedly and in contributing to the goal – alongside the validity of the key performance indicators as measures of the objective and the link to other objectives can be tested. Current key performance indicators do not reflect these linkages, but have been designed to measure only the objective in question. The next step, therefore, may be to consider, for example, one or more critical indicators for measuring the cause-and-effect relationship between staff motivation and improved institute/client relationships.

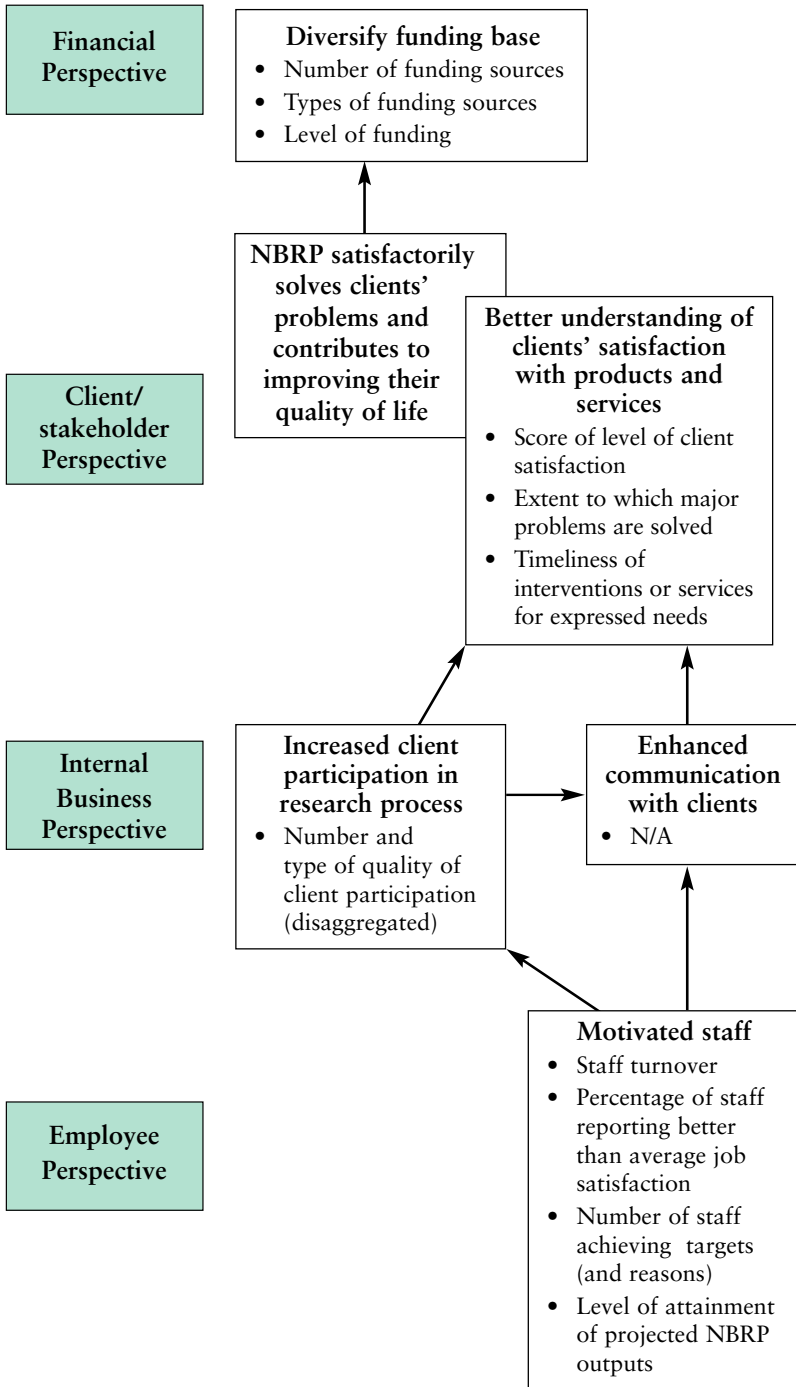


Figure 11 Snapshot of the objective-mapping exercise illustrating key performance indicators

NBRP summary

The following summary presents the main issues identified through the organizational diagnosis, the steps taken using the scorecard construction process, and the perceived value added of the project as a whole.

The organizational diagnosis identified:

- certain strengths and opportunities that NBRP would like to be better able to pursue – effective utilization of its technical comparative advantage and human resource base, strengthening of existing client base and linkages, and broadening of its scope
- certain weaknesses within the system at the organizational level – lack of a clear common goal, lack of a clearly defined set of measures that measure the right things and cut down on unnecessary paperwork
- the need to have strong, active links with clients, funders and the policy-making bodies to anticipate and respond pro-actively.

Utilizing the scorecard approach enabled:

- the reconfiguration of existing activities under the framework of the balanced scorecard – namely, a review of the programme’s goal to accurately represent the work and aims of the programme, objectives and indicators to achieve this goal, and drafted delivery plans to achieve some of these objectives
- the identification, through the use of the balanced scorecard, of areas that have not previously received attention in a systematic manner – notably methods for enhancing feedback and thus learning across several dimensions, for example, employee and client satisfaction.

Added value from this project included:

- clarification of current capacity and issues, potential opportunities and threats which reflect the existing capacity and utilization of systems within NBRP
- utilization of a framework for facilitating a broader understanding of organizational performance
- development of corporate objectives and indicators that aim to bring together the core work areas of the institute
- identification of critical success factors for achieving these objectives in view of what is currently being done in these areas; identifying current M&E activities in these areas; revealing gaps to be addressed through delivery plans.

Acronyms

CRI	Crops Research Institute
DFID	Department for International Development
FPR	Farmer Participatory Research
FRI	Food Research Institute
IDRC	International Development Research Centre
IPGRI	International Plant Genetic Resources Institute
KARI	Kawanda Agricultural Research Institute
M&E	Monitoring and Evaluation
NAADS	National Agricultural Advisory and Development Service
NARO	National Agricultural Research Organization
NARS	National Agricultural Research System
NBRP	National Banana Research Programme
NGO	Non-governmental Organization