



**Danish
Development
Research
Network**
*Bringing together
knowledge and
development*

Project management in research capacity building partnerships - Guidelines



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List of Abbreviations

CMS	Content management system
DFID	Department for International Development (UK)
ENRECA	Danida's Bilateral Programme for Enhancement of Research Capacity in Developing Countries
FAO	Food and Agriculture Organization
HERA	Health Research for Action
IDRC	International Development Research Centre (Canada)
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
KEDAHR	Kenya Danish Health Research Project
LFA	Logical Framework Approach
M&E	Monitoring and evaluation
MoFA	Danish Ministry of Foreign Affairs
NEAP	National Environmental Action Plan
NEHAP	National Environmental and Health Action Programme
NGO	Non-governmental organisation
NHS	National Health Strategy
NIS	National Innovation System
Norad	Norwegian Agency for Development Cooperation
OBS	Organisational breakdown structure
OECD	Organisation for Economic Cooperation and Development
PAP	Process Action Plan
PMF	Project management file
PML	Project management logbook
PRSP	Poverty Reduction Strategy Paper
RCB	Research capacity building
SAREC	Swedish Agency for Research Cooperation with Developing Countries
Sida	Swedish International Development Cooperation Agency
SPS	Sector programme support
SWOT	Strengths, weaknesses, opportunities, and threats analysis
UNDP	United Nations Development Programme
WBS	Work breakdown structure

Foreword

During the last couple of decades it has become increasingly clear that relevant knowledge is one of the most fundamental conditions for fast economic development. Several smaller countries in East Asia demonstrated this early on and today's fast development in China and India are very powerful testimonies to this. Much of the needed knowledge is related to new (state-of-the-art) technologies that tend to be research based. In order to develop and fully benefit from such knowledge, developing countries must be able, not only to perform relevant research, but also to train new generations of researchers. They also need to become partners of the international research networks within each field of relevance.

This is not easy, as many developing country universities have traditionally been teaching universities, and the transition to a status as research university is very complicated. Other tradition-based problems exist within individual research fields. However, on the bright side: Most developing countries have an excess of young talent, and this makes it possible and worthwhile to transfer the needed knowledge, experience, and know-how through cooperation between university researchers in developing and industrialized countries.

Denmark got involved fairly late in supporting such efforts (at least on a broader scale), only about 20 years ago, but ENRECA, the North-South university cooperation programme that was established at the time, turned out to be highly productive. Several evaluations have demonstrated its usefulness in the South, and in Denmark an important knowledge base on the developing world has been created, first of all at the universities, but also in the wider society with which the universities interact.

Twenty years ago, the experience on how to maximize the benefits of these North-South cooperative partnerships was very limited, but today a vast amount of lessons learned exist. It would be a pity if this valuable know-how was not used to strengthen future projects. One of the main purposes of these guidelines is to ensure that this does not happen by providing a practical toolbox to aid successful and relevant project development based on the experience from ENRECA projects.

Creating knowledge societies in the developing world may be the most significant contributions to sustainable development, although many traditional thinkers tend to overlook this. It is not only my hope, I also find it likely, that these guidelines will help create the needed substantial outcomes from Danish contributions towards the creation of knowledge societies in the developing world.

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1 Introduction

Danish researchers have a long tradition of engaging in North-South research capacity building (RCB) projects. Projects based on partnership principles have been implemented by Danish researchers and their South partners since 1989. The Danida funded ENRECA programme supported the implementation of more than 50 long-term projects over a 9-12 year period. A characteristic of these projects is that they have been designed and managed very differently. Considering the scientific, geographical, and organisational diversity involved in ENRECA projects, the resulting complexity is not surprising. These diverse experiences constitute a unique source of learning and inspiration for improvement of project management in future RCB projects.

Although increasing emphasis is put on formal training of researchers in project management skills, it has traditionally been a field developed through “learning-by-doing”. Excellence in project management is gained from practical experiences; but approaching the practical task in a systematic way based on an overall framework and with a broad knowledge of the project manager’s toolbox can anticipate many potential difficulties. Moreover, project management is a key competence in research management and should therefore be a core subject in RCB projects. Addressing project management professionally and from a broader perspective than simply making the project work is therefore essential.

Managing a RCB project within a North-South partnership is a task very different from managing a traditional research project in the North. Working with a partnership model is also different from traditional project management. It is not self-evident that good North researchers automatically are good project managers in a North-South partnership context. Little attention has been paid to this issue, and until now, no specific attempt has been made to support project managers in this situation.

General guidelines for project management in a development aid context are available. Danida’s guidelines, e.g. *Guidelines for Programme Management* (MoFA 2009) and *Logical Framework Approach: A Flexible tool for Participatory Development* (Dandia 1996), are useful tools, but they provide generic descriptions focusing on general planning principles. Good planning is important and quite a lot of time is invested in planning activities, but often things work out very differently from what was planned. Often, the reason for this is that the context dependent planning preconditions are not sufficiently understood by the planners. When working in a multi-cultural and inter-institutional context this pose a real risk.

General project management guidelines provide little support for RCB partnerships regarding the specific considerations upon which to base strategic management decisions, i.e. choice of project design and overall project management approach. Also management aspects of the project implementation are often hardly addressed. These guidelines seek to remedy this deficiency by addressing a project-level perspective and by focusing on project management related issues regarding how to plan and manage RCB projects.

1.1 The purpose of the guidelines

The purpose of these guidelines is to complement existing general planning methodology guidelines by providing project owners and managers with a basis for applying a holistic perspective on the design and implementation of RCB projects. Furthermore, the guidelines aim at elucidating the complexity involved in ensuring successful RCB partnerships.

The guidelines are not a final checklist on how to develop and manage a project. Project management is a practical craft. The universal “right solutions” seldom exist. Every project is different and should be designed accordingly. The ambition of the guidelines is to point to some general principles and aspects that should be considered in planning and implementing the project management in RCB projects.

In some cases, concrete recommendations are given on general project management tools or frameworks. Some examples are taken from the literature and others are based on ENRECA project managers’

experiences. The guidelines communicate the general lessons learned by ENRECA project managers and emphasis is on keeping the recommendations specific and practical.

1.2 For whom are the guidelines written?

The guidelines are based on ENRECA experiences identified in: a) Programme evaluations (MoFA 1992, 2000, 2001; Ilsøe 2005); b) Danish ENRECA project managers' answers to a survey (Hjortsø 2010); and c) interviews with Danish ENRECA project managers (Hjortsø 2010). The guidelines are thus biased towards a North perspective, and are therefore mainly directed at North researchers already involved in, or engaging in, RCB projects for the first time. On the other hand, it is believed that the guidelines can provide a useful basis for a discussion of project management issues among North and South partnership participants.

1.3 Structure of the guidelines

The guidelines have been structured according to the main project phases and activities of a generic project management model. Chapter 2 introduces the theoretical project management model used for structuring the rest of the guidelines. Chapter 3 to 8 deal with the six major phases in the project life cycle: pre-project, preparation, start-up, coordination, evaluation, and closure. Chapter 9 provides a brief conclusion.

In addition, the guidelines include of short literature review. The literature review is provided in Appendix 1 and consists of an overview of publications specifically relevant for project managers of RCB projects. Danish sources are identified as well as international literature on the RCB subject.

2 Project management guidelines

The guidelines are structured according to a generic project management model based on the International Project Management Association's (IPMA) approach (Fangel 2008). The model provides a basic structure of the phases in the project life cycle and the main activities involved in each phase. Based on this structure, the guidelines identify central issues that project managers should consider in relation to different project stages. The model is used in order to provide a common frame of reference regarding central elements of project management.

The generic project management model used in this report is shown in Figure 1. The model involves two activity levels: the project management level and the project execution level. The guidelines will not address the execution issues, i.e. the actual implementation of specific research and capacity building activities. The guidelines focus on the management processes taking place before, during, and after the project execution. A central tenet of the approach advocated here, is that project managers should be very clear on when they are engaged in project management and when they are executing the project activities. If project managers do not distinguish between management and execution, they may lose oversight of the project and forget to manage.

Implementing a project involves designing and planning the project management activities carried out during the project life cycle. Fangel (2008) identifies the following six project phases: pre-project, preparation, start-up, coordination, evaluation, and closure. These guidelines are structured according to the six project phases. Activities at the project management level involve four activity areas: 1) Planning and evaluation of the project management effort; 2) organising the project management phases; 3) performing overall project management, i.e. conducting anchoring, analysis, and master planning; and 4) performing ongoing project management, i.e. carrying out detailed planning, project monitoring, and ongoing leadership. Activity areas and activities are shown in Figure 1. To a varied degree, each of the six phases involves all or some of the four activity areas, e.g. during preparation, start-up, and evaluation most of the activities are addressed or at least briefly reviewed. In the guidelines, the focus is on the main activities carried out during the specific project phase, and activities are presented as a linear process. But

it is important to remember that project management is not a linear process and a project manager should always keep in mind the four activity areas and consider how they interact as the project proceeds.

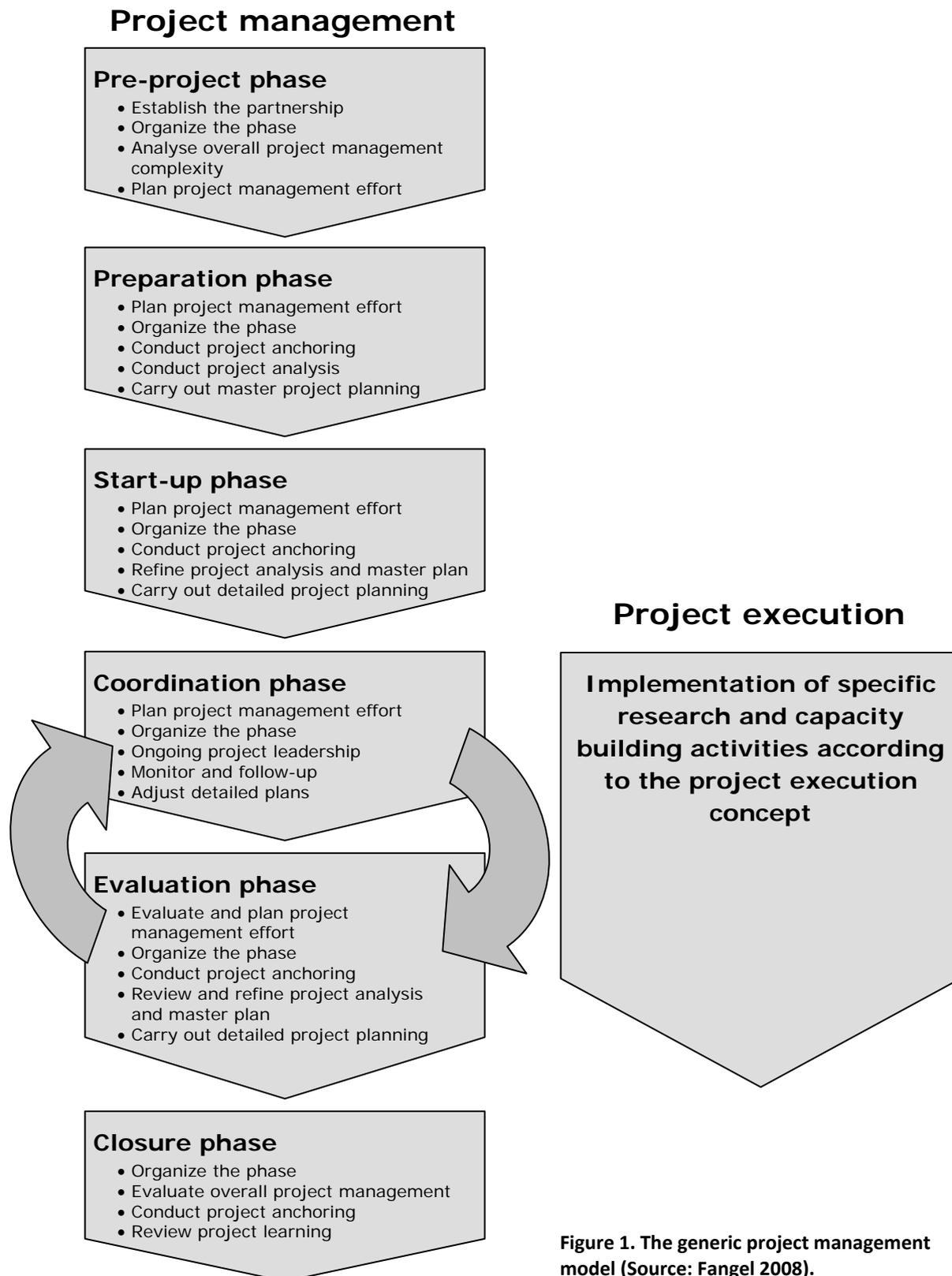


Figure 1. The generic project management model (Source: Fangel 2008).

3 Pre-project phase - planning the project management effort

Project management checklist for the pre-project phase

- √ Find the right partner - avoid getting committed too early in the search process
- √ If possible, collaborating partners should get to know each other before establishing the RCB project
- √ Ensure the right twinning arrangements at the individual researcher level to foster engagement and commitment
- √ Be realistic when defining project objectives - avoid being overambitious
- √ Identify and develop the South partners' strengths rather than focusing on their weaknesses
- √ Make sure that the project design reflects the management setting and project vision
- √ Ensure that inter- and multidisciplinary collaboration is supported by the project design
- √ Analyse and discuss the specific management challenges associated with RCB projects
- √ Take into account that RCB project management is often more time demanding than initially foreseen
- √ Analyse and define what in the specific context is the desired degree of project management integration with the South institution
- √ Ensure that the project is well-anchored in the South institution and contributes to the overall strategy of the institution
- √ Clarify and discuss the roles of North project managers staying for longer periods in South
- √ Design project management processes in order to avoid that North project managers staying in South become overwhelmed by day-to-day administration (if they are researchers as well)
- √ Ensure that both North and South institutions contribute to the project and make contributions explicit
- √ Inquire into and understand incentive structures and how they impact project participants' behaviour
- √ Be creative in finding other ways to motivate South researchers, when providing direct salary is not an option
- √ Aim at understanding the fundamentals of South organizational politics and decision-making processes

The pre-project phase can be defined as the time used to develop the foundation for the specific project. Among other things, this involves establishing initial contacts; developing networks; scanning for potential partners; establishing the partnership; getting North and South colleagues to know each other; and developing the basic project concept.

3.1 Project management complexity

Many factors influence the success of RCB projects. Partners should be conscious about these factors and discuss how they influence project management and execution. An analysis of the involved project management complexity should address the following: Project definition, the physical and institutional environment, and project implementation. Box 1 illustrates some of the factors to be addressed. The partners should discuss how to address these factors in the project design and project management strategy.

3.2 Organization of the pre-project phase

Sufficient time and resources should be available for the partners to interact in order to build up mutual trust and "find each other". Ability to establish an open dialogue can have direct implications for future openness and transparency and hence project quality.

Before initiating the project preparation phase, the partners should develop a concept note or idea outline describing and defining: a) the project background and purpose, b) the beneficiaries and stakeholders, c) the expected outcome, d) relations to international and national strategies and policies, and university and department strategies, and e) existing research activities and other projects. The outline should moreover provide an initial estimate of the time and resource frame. Furthermore, the outline should identify central

elements in project management complexity to take into consideration during project planning and implementation.

3.3 Selection of partner institution

Both institutional and personal contacts play an important role when initiating RCB projects, but partners should consider if the project is top-down or bottom-up initiated and how this may affect the project design: Is the project based on the top management's institutional interests or is it grown out of individual researchers' professional collaboration? Either of these approaches may result in successful projects, but a top-down initiated project requires consideration of how to ensure involvement of individual researchers, whereas in a bottom-up initiated project sufficient support and attention from the top-management must be ensured.

Partners should recognize that trade-offs may exist between research output and capacity building. If much capacity building is needed, the project may not be successful in achieving high quality research outputs, at least not in the short run. The North partner's selection of South partner institutions should be based on realistic selection criteria reflecting the objectives of the North partner, and partners should avoid committing themselves too early in the process. Knowing personally the potential partner institution as well as the individual key project participants provides a good basis for assessing whether a fruitful collaboration can evolve.

Box 1: Elements defining the project management complexity level

Definition

- Organizational or individual capacity building focus
- Long-term or short-term research projects
- Few or several participating institutions
- Common history or new partnership
- Individual or institutional contacts
- Degree of cross-disciplinary research
- Number of outcomes

Environment

- Characteristics of the political and social environment
- Organizational setting, e.g. university governance structure and incentive structures
- Type of research culture and level of research capacity of local partners
- Level of administrative and project management experiences in partnership institutions
- Number of stakeholders
- Physical conditions, e.g. potential impact on activities from natural disasters, rainy seasons, etc.
- Tax regulations and administrative procedures in relation to procurement

Implementation

- Stage(s) in project life cycle
- Degree of cross-professional collaboration
- Degree of cross-organizational collaboration
- Part time or full time project participants
- Degree of innovation involved in the activities

3.4 Assessment of the strengths and weaknesses of the partners

The level of the South partner's institutional capacity has implications for the partner's ability to conduct research management and execute activities. High capacity institutions can manage more research-based and locally driven projects, whereas low capacity institutions require a broader North involvement and well-defined approaches with fewer activities; focus on tangible outcomes; and a shorter planning horizon. A SWOT (strengths, weaknesses, opportunities, and threats) analysis can be used to identify the internal strengths and weaknesses of the North and South partner institutions as well as the environmental opportunities and threats which the partners are facing. The SWOT analysis provides a useful basis for considerations about which project execution concept to apply, i.e. how specific activities are designed, in the specific project context. The SWOT analysis is explained in Appendix 2. The analysis is useful for identifying what partners are good at. Thinking in capacity building may lead to a "negative" perspective, where the focus is on what is not working rather than what is working and can be improved. Having, as a starting point, existing interests and capacities can be a more motivating approach.

3.5 Ensure balanced relationship

Project managers should be conscious about how project activities and management can create asymmetric relations. Avoid “junior-senior” relationships regarding the researchers’ educational level as well as at the institutional level. Twinning the right North and South colleagues is essential - matching objectives, ambitions and competencies is important to ensure good collaboration. The individual match between project partners is important since project success is often based on reciprocity, trust, mutual understanding and enthusiasm.

Ensure that both partners contribute resources, and make resource contributions explicit (both when contributions are in kind and regular funding). Requiring and obtaining a substantial contribution from South partners may indicate sincere commitment from South decision-makers. Create a clear and shared vision of who will be responsible for what in which phases of the project, and consider how this can be supported by the project design and the management strategy.

3.6 Project objectives

Start up slowly and open-minded, and make sure that both North and South can influence the project ideas. Define project objectives jointly, ensure acceptance by both South and North, and create incentives for both partners. A common vision has crucial importance for the success of the planning and execution of the project, the sustainability of the project, and the feeling of ownership among the partners. Discuss the project focus, i.e. the balance between research and capacity building, and the intervention level, i.e. the balance between organizational and individual capacity building, and make sure that the implications of the chosen objectives are recognized by the participants. Be realistic in defining the project’s objectives – avoid being overambitious. Address potentially conflicting interests from the start, and look for areas where interests can be synergistic. If seed money or an initiative grant is obtained, it should be used actively to conduct joint organizational analysis and review of institutional policies at the South institution to support the development of the final project objectives.

3.7 Project design – scope and scale

RCB projects can have a different balance between result and process orientation, and the project design should rely on a clear understanding of the degree of management complexity associated with the chosen project orientation. It is recommended to be realistic and initiate collaboration on a manageable scale and with sufficient time to develop the management processes. A bell-shaped development of the project cycle, where start-up and closure phases are prolonged and relatively low intensity periods, is recommended. This ensures sufficient time to establish collaboration patterns and administrative procedures from the beginning of the project, and it allows activities to be executed and finished without unnecessary time pressure in the final stage. At the same time, during the start-up phase, projects must consider how to ensure initial momentum and maintain participants’ interest and engagement.

Project managers should consider how to address internal strengths and weaknesses as well as external opportunities and threats in the project design, while focusing on building on South partner’s strengths rather than struggling with the weaknesses. Consider the management implications of the number of institutions and research disciplines involved. Involving several partners and disciplines complicates management, and may be postponed until a core partnership is established. Discuss the degree of stakeholder involvement and the associated benefits and disadvantages. If the partnership starts out with a narrow research-focus it should be considered how it can develop over time to ensure institutionalisation of the project into a broader research and teaching context, in order to avoid that the RCB project remains an island of cooperative research between few individuals.

3.8 Project management strategy

Deciding on the overall management strategy among other things involves taking into consideration:

- 1) The degree of participants' involvement in ongoing management tasks - e.g. if the project should be managed through a centralized or decentralized approach?
- 2) The balance between North and South being in charge of project management - e.g. should the project be initiated with a North coordinator staying in the South institution?
- 3) The degree of integration of the project in existing structures - e.g. to what degree should administrative procedures and decision making be integrated or separated from the South organization's existing structures?
- 4) The balance between process and result focus - e.g. how involved should the project be in designing specific research and capacity building activities?

RCB projects are in general challenging and time-consuming to manage. Most project managers have used more time on management than planned at the outset. Partners should consider the degree of complexity that is associated with project objectives and the working environment and discuss the implications for project management. An important issue is the degree of integration aimed for. Projects should, in principle, avoid creating parallel structures or systems in the South partner's organization, but if the existing South administration is weak, establishing an independent project administration can be necessary. Such an administration can serve as a benchmark for good governance in weaker South institutions. But a strong independent project organization may also run the risk of becoming a "project island". The choice of management strategy can also impact South-South interaction. An independent project organization can be a preferred solution in order to avoid asymmetric South-South relations in projects involving multiple South partners.

Partnerships should also consider how the project management strategy can minimize the involved researchers' administrative workload. Many RCB projects are managed by researchers, but projects can also choose to employ non-researchers as project managers dealing with administrative and co-ordinating tasks only.

3.9 Create incentives for collaboration

Constructive collaboration can only develop if both South and North partners understand and accept the motivation, incentives, and institutional dynamics influencing the involved individuals and institutions. Project success depends on the match between individual participants' and the project's objectives. A good understanding of the incentive structures influencing North and South participants is therefore crucial. North partners should be conscious of the living and working conditions of South partners and how these factors affect their project participation. Discuss the political dimension of university leadership and consider how local management practices and politics can influence the South participants' involvement. However, South researchers may lack incentives to participate for a range of institutional or personal reasons that can be difficult to explore

Box 2: Incentive used in ENRECA projects

- Per diem when on field work
- Participation in workshops and short courses
- Participation in national and international conferences
- Funding of small projects based on the researcher's own ideas
- Direct payment on the grounds of publication of local working papers and national or international journal articles
- Research visits to Danish partner institution
- Funding of local Masters
- Infrastructure investments
- Organizational build-up that creates long-term opportunities
- Support establishment of new projects that provide additional funding and job opportunities

at the beginning of a project. Consider and discuss the implications of working with existing organizational resources only for project objectives, design, and management, e.g. when there is limited opportunity to employ South researchers. Be creative when developing incentives to motivate South and North participation. Involvement of North researchers is supported by focusing on quality research and publication opportunities. A list of incentives used in RCB projects is provided in Box 2.

4 Project preparation phase

Project preparation involves the following activities: Project anchoring, project analysis, and master project planning. Each of these activity areas are discussed in the following. Analysis and planning should be seen in context. Project analysis aims at exploring and understanding the present situation to ensure effective planning. Planning involves: Identifying the desired impact; specifying the outcomes that can achieve the desired impact; designing the project outputs/deliverables that can produce the outcomes; and identifying and organising the inputs needed to support activities that result in planned outputs. The logic of the development project methodology is illustrated in Figure 2.

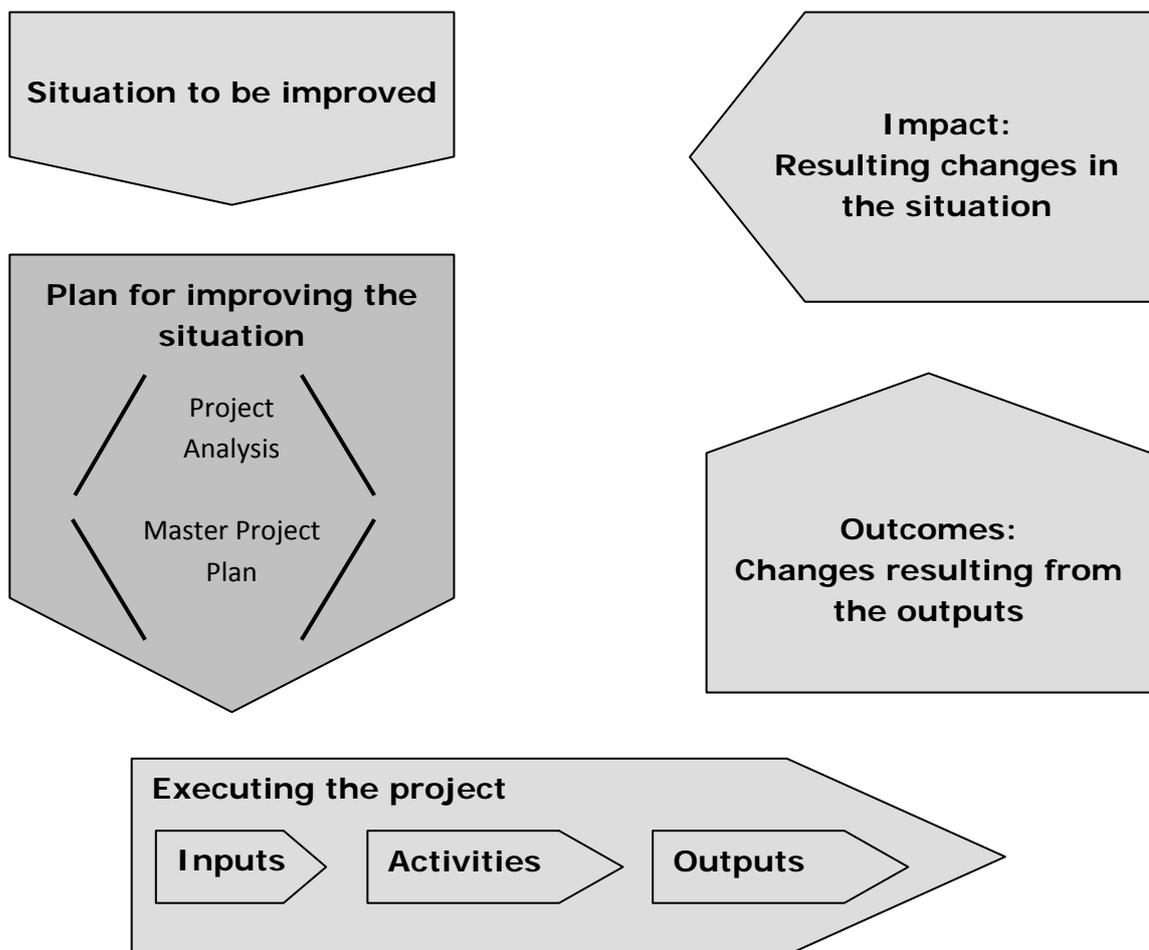


Figure 2. The development project process. Project plans describe how inputs are used in activities to produce outputs that result in outcomes that change the situation to be improved. The planning process (or project preparation phase) involves a diverting analysis stage and a converting master project planning stage.

4.1 Project anchoring

Project management checklist for the project anchoring

- √ Ensure the project's developmental relevance by linking to national and sectorial strategies and policies
- √ Ensure and maintain the interest of South university leaders to obtain high-level institutional support for the project
- √ Align as much as possible with South university research strategies and administrative systems to ensure legitimacy and to facilitate project execution
- √ Analyse the stakeholder "landscape" to identify external and internal interests
- √ Encourage and support frequent face-to-face contact between North and South researchers to facilitate mutual understanding and on-going coordination

The purpose of the anchoring activities is to ensure that a project is seen as relevant and important by its stakeholders and that a sense of ownership is established. Anchoring helps the project to focus on outcomes that can achieve an impact. A partnership should ensure that the project addresses the right issues. Involving external and internal stakeholders in the development and execution of a project can help to focus on outputs that will be perceived as relevant and useful by their end-users, and such outputs are therefore more likely to have an impact. Anchoring also aims at ensuring that the project obtains the different resources needed for producing the wanted outputs, e.g. having the goodwill of university management and faculty staff is important in order to ensure the flow of resources and support needed for successful implementation.

A stakeholder analysis is used to identify and discuss who are to be considered as stakeholders, what their interests and success criteria are, and how anchoring activities can be designed to achieve necessary communication. Anchoring activities are directed *upwards* towards decision-makers in the involved institutions, *outwards* towards end-users and resource persons external to the project organization, and *inwards* towards participants in the project organization/team. Anchoring activities are carried out with varied intensity throughout the whole project life cycle. Initially, a significant effort is made during preparation and start-up phases. During project execution, anchoring is used as a means for keeping the project on track by ensuring: That the project is supported with adequate resources; that project outputs maintain relevance for end-users; and that the project participants stay focused on and committed to executing planned activities.

4.1.1 Upwards anchoring

The tools that projects use to perform upwards anchoring include: An ongoing dialogue and networking with relevant key individuals in the organization, steering committee meetings, and communication through periodical progress reports.

Upwards anchoring involves maintaining an ongoing dialog with decision-makers in both North and South partner institutions to ensure that major decisions are approved and supported. Support from influential South university leaders is important. The anchoring effort supports the sustainability strategy by establishing a shared vision for the future. Aligning the project with South university strategies, policies, procedures and norms legitimizes project activities and can prevent administrative and "political" problems during execution. Partners should discuss how a steering committee can be used as a means for upwards anchoring in the South, and they should be conscious about how steering committee members can be used to build support for the project.

4.1.2 Outwards anchoring

Outwards anchoring is an important part of the project definition phase, but maintaining focus on anchoring activities throughout the whole project is important. Anchoring is oriented towards external stakeholders who can contribute knowledge and resources to the project, stakeholders directly related to project outcomes, and sector stakeholders.

If the project is based on external funding, the donor is the primary external stakeholder. Understanding the perspective of the donor and the project selection criteria applied is imperative for success. It can be time-consuming to understand the specific developmental issues in the South partner country, and to obtain the local policy information relevant for development of a project idea. But doing so is important, as it will make the project relevant to the donor and furthermore support project impact and sustainability. Project managers should investigate if donor organizations can support applicants in their project development process, e.g. with background information or institutional contacts in the South.

The relevance of involving external stakeholders in the project varies with the type of project focus and activities. In some projects, it is relevant to be outwards-oriented and involve different stakeholders directly in the activities; in other projects this is less relevant. In some countries, good personal connections and a well-developed network is a necessity for project development, whereas in other countries this is less pronounced.

Outwards anchoring helps ensure that the perspective of the end-users of research results is taken into consideration in the project definition, and an ongoing involvement of end-users helps ensure that the project stays focused on relevant outputs. But in long-term RCB projects ensuring that results are disseminated and put into practice by end-users is also an important element of outwards anchoring. Specific tools that projects use for outwards anchoring during project execution include: Newsletters, information meetings, symposiums, conferences, policy briefs, regular meetings, end-user workshops (e.g. with farmers to analyse problems or disseminate results), and engaging with potential collaborators.

4.1.3 Inwards anchoring

Inwards anchoring involves team-building aimed at creating a common vision, a shared perception of project objectives and plans, and an acceptance of and willingness to deliver the effort needed to reach the project goals. Inwards anchoring involves considering incentive structures and how ownership can be developed and supported. Establishing a team spirit in a capacity building focused project can be difficult due to the broad nature of the activities, but involving participants in planning the project is an important way to create a common understanding of the project, and how it is to be implemented. In more research-based projects, inwards anchoring can be supported by maintaining a focus on research quality and North-South collaboration.

The project management should address the issue of inwards anchoring continuously, but a special effort should be made during project preparation and start-up phases through the involvement of participants in planning the project. During the rest of the project, the manager's tools for supporting team-building include: Regular planning workshops, internal newsletters, joint excursions and field trips, social events, and collective celebration of successes (e.g. when something is published).

4.2 Project analysis

Project management checklist for the project analysis

- √ Discuss and address in the project design and management strategy the fundamentals of the national and organizational cultures in the setting in which the project is to be implemented
- √ Conduct an organizational analysis and a needs assessment as a basis for designing the capacity building effort
- √ Analyse the stakeholder “landscape” to identify stakeholders, their concerns and success criteria, and opportunities for integrating external resources that can support the project
- √ Discuss and agree with South partners on the role and importance of stakeholders
- √ Identify potential risks and uncertainties and address such risks proactively

The project *analysis phase* has as its purpose to establish a clear picture of the situation in which the project is to be implemented. From a research point of view, participants want to understand the research setting and the nature of the problems to be addressed. From a development or capacity building point of view, participants want to understand “the situation to be improved” and establish an understanding of the baseline situation from which to define capacity development needs.

Establishing a North-South RCB partnership is a challenging task. The partners have to adjust to foreign cultures, work in new organizational settings, and do research under unknown and uncertain conditions. Trying to understand as much as possible of this complexity from the beginning is very useful.

Project analysis involves a range of analyses of the project conditions (in contrast to project execution issues, i.e. how to implement specific research and capacity building activities). Project analysis provides the basis for the management of the project, and it is an open and diverging process emphasising the participants’ creativity. Activities aim to: motivate participants by providing them with a solid understanding of the project; review previously obtained information; and create a platform for project planning.

As indicated in Figure 1, project analysis is a recurrent activity that participants frequently return to, e.g. in connection with project start-up and evaluations, in order to provide an improved and updated basis for decision making regarding adjustments of the project scope.

4.2.1 Situation analysis

The situation analysis is used to create an overview of the situation and context at the beginning of the project development. During the situation analysis, participants are encouraged to raise questions and comments to the master project plan topics (content, objectives, resource frame, main processes, and organization). Based on participants’ questions and comments, the master project plan topics are discussed. The situation analysis promotes an understanding of the specific details involved in the project situation.

4.2.2 Cultural analysis

Partners should consider the implications that cultural differences may have for project design, planning and implementation. Partners should inquire into and develop a mutual understanding of each others organizational cultures. Making explicit and discussing in a respectful and inquiring manner the differences that impact the collaboration can enhance the partnership. But do not overinterpret the cultural differences. A closer look will often reveal that organizational differences are not as pronounced as they seem at a first glance.

Culture is defined as a set of shared attitudes, values, goals, and practices that characterizes an institution, organization, or group. It may be useful to have a model for framing or initiating discussions on culture. A

starting point can be to discuss Geert Hofstede's (2001) five dimensions of culture (See Box 3). Partners should of course be cautious not to categorize each other, but rather use such theoretical models to facilitate open discussions on the differences they experience and how such differences influence the collaboration. Another way to obtain a better understanding of a partner organization and the working conditions of a colleague is by "shadowing" the colleague for a period of time. By observing each others daily routines and social interaction, partners may obtain valuable information useful for shaping the assumption on which the project design is based.

Truly understanding a foreign national and organizational culture is very difficult and it requires substantial interaction with the organization. This may not always be possible, and an obvious shortcut is to use project managers experienced with the specific cultural setting as sparring partners in discussions on project design and management strategy, as well as for challenging the underlying assumptions.

4.2.3 National strategies and policy papers

RCB project relevance is supported by ensuring that project objectives are linked with national South development priorities. Different sources of information are available depending on the scope of the project. One of the most important documents outlining the overall national development strategy is the Poverty Reduction Strategy Paper (PRSP). IMF¹ hosts a website where PRSPs and annual progress reports can be found for all member countries. The partner country's National Development Strategy or a similar document will also indicate national priorities and important initiatives in the near future.

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Sector specific policy papers, such as National Environmental Action Plans (NEAP), National Environmental and Health Action Programmes (NEHAP), and National Health Strategies (NHS) as well as country specific general background information are often available and can be identified on South countries' governmental websites or through United Nations organizations, such as UNDP, FAO, and IMF.

It may be difficult to know what is relevant and what is not, but visiting relevant South government agencies to introduce the project idea and generate support for the partnership, as well as being briefed on national developments within the subject area is useful to clarify how a project can orientate itself towards local development priorities. Such contact is also an opportunity to gather policy documents and other

Box 3: Cultural analysis - Hofstede's five dimensions of culture

Geert Hofstede has studied the interactions between national cultures and organizational cultures. He has found five dimensions of culture in his study of national work related values:

Low vs. high power distance – the extent to which the less powerful members of institutions and organizations expect and accept that power is distributed unequally.

Individualism vs. collectivism – individualism is contrasted with collectivism, and refers to the extent to which people are expected to stand up for themselves and to choose their own affiliations, or alternatively act predominantly as a member of a life-long group or organization.

Masculinity vs. femininity – refers to the value placed on traditionally male or female values (as understood in most Western cultures). So-called "masculine" cultures value competitiveness, assertiveness, ambition, and the accumulation of wealth and material possessions, whereas feminine cultures place more value on relationships and quality of life.

Uncertainty avoidance – reflects the extent to which members of a society attempt to cope with anxiety by minimizing uncertainty.

Long vs. short term orientation – describes a society's "time horizon", or the importance attached to the future versus the past and present.

These cultural differences describe averages or tendencies and not characteristics of individuals.

(Source: http://en.wikipedia.org/wiki/Geert_Hofstede)

¹ See: <http://www.imf.org/external/NP/prsp/prsp.asp>

information, including information on other research and development projects and upcoming policy initiatives, and a RCB project can thus function as an important mechanism for linking South research and governmental institutions.

4.2.4 Sector level analysis

Understanding the specific sector dynamics and ongoing developments can contribute to ensure future relevance of South partners' research and teaching competencies and thus contribute to long-term sustainability and project impact. But understanding the sector and broader context can be difficult, and project resources for doing so are typically limited. Sector analysis can be integrated as an explicit activity in the pre-project period or preparation phase. Mapping out the sector relevant part of the national innovation system (NIS) is a way to gain insight into the broader institutional context. According to OECD (1997, 1999), NIS institutions can be divided into five main categories:

- *Governments* (local, regional, national, and international) that play the key role in setting broad policy directions
- *Bridging institutions*, such as research councils and research associations which act as intermediaries between governments and the performers of research
- *Private enterprises* and the research institutes they finance
- *Universities* and related institutions that provide key knowledge and skills
- *Other public and private organizations* that play a role in the NIS (NGOs, public laboratories, technology transfer organizations, joint research institutes, patent offices, training organizations, etc.)

Performing a joint NIS analysis may contribute to long-term project sustainability by identifying sources for additional research funding as well as potential project partners and collaborators. This can be useful, e.g. in relation to obtaining access to field research opportunities or data and literature in NGOs' or governmental institutions' libraries.

4.2.5 Organizational analysis

Organizational analysis is considered fundamental for obtaining the needed insight into the partner's organization – especially if the project focuses on institutional capacity building. An overview of general norms, rules, and procedures at the South institution provides an input for decisions on activity design and project management strategy. Important issues to include in the analysis are: Perspectives on teaching and research; existing resource level and allocation; organization of administration and management; financial administration; the governance structure at the university; and incentive structures and behavioural patterns.

Project partners can start the development of the organizational analysis in a joint workshop and base it on a jointly defined analytical framework. North and South project managers can further develop the analysis through interviews with key participants and stakeholders. Additional information will emerge throughout the whole project life cycle. Many informal "rules-in-use" and norms are difficult, if not impossible, to make explicit during project preparation, but they will emerge during the execution. Also, more formal rules regarding issues that influence project implementation, such as administrative procedures and formal incentive structures, can be difficult to make explicit to outsiders. An in-depth organizational assessment is found in Lusthaus et al. (2002)². The framework is shown in Box 4. The approach includes participatory tools for conducting a bottom-up assessment involving project participants. Conducting a full-scale

² See: http://www.idrc.ca/en/ev-23987-201-1-DO_TOPIC.html. The book is available in English, Spanish and French.

assessment is not realistic, if time and other resources are not allocated explicitly for this purpose, and it may be necessary to involve an external process facilitator or consultant to support the process. The IDRC framework can also provide a platform for discussing and drawing attention to organizational performance, e.g. in connection with a leadership and management capacity building component.

Several development-related institutions provide sourcebooks on institutional or organizational analysis, e.g. IFAD's *Institutional and organisational analysis for pro-poor change: meeting IFAD's millennium challenges*³. IFAD has also published *Guidance notes for institutional analysis in rural development programmes*⁴ that provides a synthesis of the training materials developed as part of IFAD's institutional analysis methodology.

Box 4: The organizational assessment framework

In their book *Institutional Assessment*, Lusthaus et al. (2002) present the following framework for analysing organizations. The book is available in English, French, and Spanish at the International Development Research Centre (IDRC) website (<http://www.idrc.ca>).

Organizational performance refers to the ability of an organization to meet its goals and achieve its mission. Performance can be gauged in terms of four key indicators:

- Effectiveness: The degree to which the organization achieves its objectives
- Efficiency: The degree to which it generates its products using a minimum of inputs
- Relevance: The degree to which the organization's objectives and activities reflect the necessities and priorities of key stakeholders
- Financial sustainability: The conditions to make an organization financially viable

Organizational capacity refers to the resources, knowledge, and processes employed by the organization. For example:

- Staffing
- Infrastructure, technology, and financial resources
- Strategic leadership
- Program and process management
- Networks and linkages with other organizations and groups

External operating environment refers to the external environment in which the organization carries out its activities. For example:

- The administrative and legal systems in which the organization operates
- The policies and political environment that influences the organization
- The social and cultural milieu
- The technology available
- Economic trends

Internal environment refers to internal factors that influence the direction of the organization and the energy displayed in its activities. For example:

- Incentive and rewards systems
- The organizational "climate" or "culture"
- The history and traditions of the organization
- Leadership and management style
- Clarity and acceptance of the organization's mission
- Extent of shared norms and values promoting teamwork and pursuit of organizational goals
- Organizational structure

³ See: <http://www.ifad.org/english/institutions/sourcebook.pdf>

⁴ See: <http://www.ifad.org/english/institutions/>

Box 5: A needs assessment for a RCB project

Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen (DBL) is using the following needs assessment based on the concepts of tangible, human, managerial, and social capitals. For each type of capital a short analysis is made of existing capacity, expressed needs, and the costs of meeting the needs. The total report is kept in a simple and short format (five pages) and is finalized with a conclusion on institutional potential, human potential, and identification of main shortcomings and training needs. Finally, a number of performance indicators are listed and the present status assessed.

Tangible capital

- Buildings (available space for department and staff offices, store)
- Teaching facilities (available lecture halls and other teaching facilities)
- Library facilities (available journals, online databases, books, buildings, equipment, software)
- Laboratory facilities (available buildings, equipment, personnel)
- Equipment for field research (available equipment)
- General administrative support facilities (means of communication, internet connections, photocopiers, scanners, software)
- Means of transportation (own vehicles, availability of university vehicles)

Human capital

- Number and level of scientific staff (number of researchers, gender distribution, temporary and permanent employment, distribution on disciplines, number of PhDs, Masters or Bachelors)
- Number of support staff (functions, gender distribution, education, and training)
- Number of students or trainees (number of PhDs, Masters, undergraduates)

Managerial capital

- Description of procedures of financial management
- Accountant and internal auditor (at what administrative level and with what qualifications)
- IT and other equipment support and maintenance (personnel and qualifications)
- Management and leadership training
- Long and short-term planning and policy procedures

Social capital

- Capacity building partnerships/projects
- Research collaboration agreements
- PhD and post doctoral research affiliation
- Collaboration with NGOs and governmental authorities (research, dissemination, training, advisory service, consultancies)
- Public relations and website

4.2.6 Needs assessment

The needs assessment can be defined as a decision-aiding tool for planning and resource allocation involving the gathering and analysis of information on the organization, its environment, its capacity needs and problems and possible solutions (Horton et al. 2009). In the Logical Framework Approach (LFA), the needs assessment is carried out in terms of a “problem tree” showing the identified needs and problems. The needs assessment is often carried out in a participatory workshop involving academic and administrative staff members. Combining the needs assessment with a broader organizational analysis or the SWOT analysis can provide a balanced input for developing a project’s objectives and design. The framework presented in Box 5 is used for conducting a joint needs assessment in RCB partnerships.

The framework builds on four different types of capital: Tangible, human, managerial and social⁵. It is recommended to keep the needs assessment simple and easy to implement. The assessment provides partners with substantial information for project planning as well as a useful baseline for future monitoring.

4.2.7 Stakeholder analysis

The partners should discuss their understanding of the stakeholder concept, as well as the benefits and disadvantages resulting from involving stakeholders in project activities. A stakeholder analysis⁶ is used to identify individuals or groups who are likely to affect or be affected by the activities of a project. Although the analysis may be carried out as part of an initial planning workshop, the analysis should be developed continuously as additional information emerges during the start-up and execution phases.

A stakeholder analysis involves a process where stakeholders are identified, described, prioritized, and categorized as a basis for designing project activities. The first step is a brainstorm identifying all possible stakeholders. Stakeholders are then prioritized as primary and secondary. Starting with the highest prioritized stakeholders, each of these are then briefly described regarding: What their main concerns or problems are; what success criteria each of the stakeholders have, i.e. what will make the stakeholder experience the project as a success; what they may contribute to the project; and how they are influenced by or may themselves influence the project. The process and specific tools for conducting the stakeholder analysis are shown in Appendix 2.

Having created this overview, the analysis then focuses on the stakeholder management dimension, i.e. how the project can meet stakeholders' success criteria through its activities, in order to obtain their support and achieve impact. It is essential to link the result of the stakeholder analysis to other analyses, e.g. risk analysis and organizational analysis, as well as with the master project planning process, e.g. the activity planning, communication and dissemination strategy, and the sustainability strategy.

Dealing proactively with stakeholder issues is an important element in research management. Being able to interact dynamically with a range of stakeholders, such as research users (e.g. local communities, policy makers, and public authorities) and funding agencies/donors, is imperative for developing South research opportunities in the future. Understanding stakeholders and being able to manage them is therefore not only a project management tool, but also an important competence area to include in institutional capacity building.

4.2.8 Gender analysis

Gender analysis is part of a project baseline study. Gender analysis can be defined as “the systematic gathering and examination of information on gender differences (gaps) and social relations in order to identify, understand, and redress inequities and inequalities based on gender” (World Bank 1996). The World Bank Participation Sourcebook (World Bank 1996) prescribes that gender analysis comprise the following five major categories of information: 1) needs assessment; 2) activities profile; 3) resources, access, and control profile; 4) benefits and incentives analysis; and 5) institutional constraints and opportunities. Gender analysis addresses roles and distribution of power and resources. Stakeholders who share gender concerns can be identified to be included as project partners in relation to gender issues. If a project chooses to apply an explicit gender perspective, a specific strategy should be developed to ensure representation and active participation of both women and men in the planning process, and to check that their gendered interests are reflected in decisions made.

⁵ For an introduction to the capital types in a research capacity development context, see MoFA (2000).

⁶ *Interest analysis* is another term used for this type of analysis. A comprehensive introduction to stakeholder theory and practice can be found in Friedman and Miles (2006).

For partnerships who want to address gender issues, DFID's *The gender manual: a practical guide*⁷ may provide a useful entrance point. The manual is designed to help non-gender specialists in recognising and addressing gender equality issues in their development work.

4.2.9 Risk analysis

The risk analysis helps create a shared perception among project participants of the risks and uncertainties involved in the project. Conducting an explicit risk analysis during the project preparation stage allows the partners to discuss alternative project designs to reach the objectives. Thereby the risk analysis helps identify more robust strategies.

Compared to the identification of assumptions known in the LFA, the risk analysis proposed here is considered more proactive, but it does not need to be very sophisticated. The risk analysis can be started by brainstorming expected risks and uncertainties, or a risk breakdown structure based on participants' previous experiences can be developed. A risk breakdown structure is a list of potential risks associated with different activities or stages in the project. The list in Box 6 shows examples of risk and uncertainty factors, as identified by ENRECA project managers. Such a list can be used as a dialogue tool when discussing risk management strategies within the partnership. Another source of input for the risk analysis is the stakeholder analysis during which stakeholder-induced risks may be identified.

The risk analysis involves assessing consequences and the probability of risk occurrence. Initiatives are developed or project activities designed in order to limit probability or reduce consequences. Not all problems are easy to recognize early in the project, and ease of discovery should be taken into consideration. If a serious risk is difficult to detect, a special monitoring effort has to be made. High risk elements may call for changes in project design or a plan B should be prepared in case the risk materializes. Less risky elements may be monitored and dealt with if they happen. Appendix 2 presents examples of the tools used in the risk analysis.

Box 6: Example of risk breakdown structure for RCB projects

PhD scholarship programme

- PhD students extend their study time
- Lack of adequate South advisors for the 'sandwich' PhD students
- PhD students are teaching instead of carrying out the planned research
- Lack of qualified PhD student candidates

Research activities

- Changes in research processes are not communicated to all participants
- The climate impacts field research negatively

Partnership issues

- New university authorities feel little ownership to the project and fail to allocate planned resources
- The local coordinator leaves the project for a better job

Administration

- The central university authorities replace an experienced accountant with an inexperienced one
- Activities are paralysed by administrative requirements
- Annual accounting is not produced before the deadline

Communication issues

- Problems are not communicated
- Changes in plans are not communicated

Participation issues

- Lack of local ownership and personal incentives leads to poor activity implementation
- Gender inequity in project participation

⁷ See: <http://www.dfid.gov.uk/Documents/publications/dfid-gender-manual-2008.pdf>

4.3 Master project planning

Project management checklist for the master project planning

- √ Ensure that both North and South partners are engaged in defining the project objectives and outputs
- √ Facilitate that a shared understanding of project objectives and plans is established and maintained throughout the project
- √ Use graphical tools to support joint development of the “objective tree”, WBS and milestone plan
- √ Develop realistic plans with sufficient flexibility and slack to accommodate uncertainties and exploit emerging opportunities
- √ Ensure a clear definition of roles and responsibilities between project participants and agree on role expectations
- √ Analyse and address explicitly the challenges associated with working in ad hoc cross-organizational structures
- √ Establish an strategy for internal and external communication identifying means, forms and responsibilities
- √ Establish a monitoring and evaluation system to focus attention on important improvements
- √ Use an activity-based project budget to support financial monitoring and control
- √ Develop an overall sustainability strategy and integrate appropriate activities in the project plans from the beginning of the project

The result of the project analysis provides a basis for the *master project plan*. Master project planning is the process of clarifying: Project context, project objectives, the resource frame, the main processes, the roles and responsibilities, the project organization, and the main budget. Contrary to project analysis, the planning stage is a converging process leading to a concrete description of how objectives should be reached. Figure 3 illustrates the sequential logic of the planning activities, but the iterative nature of the process is emphasized. Planners must be able to move back and forth between planning activities continuously adjusting project objectives, specific activities, and the resource allocation.

The master project plan is the basis for the management’s or an external donor’s decision on whether or not to initiate the project. The plan can also be seen as a “contract” or agreement between the project owners, project managers, and project participants. The plan and planning process contribute to a shared perception among participants of expected results, methods to apply and responsibilities of participants.

4.3.1 Project context and situation

The partnership should start the planning process by specifying the context and situation, including preconditions and assumptions. The description is a synthesis of the information obtained through the initial SWOT analysis, the institutional/organizational analysis, the stakeholder and gender analysis, the needs assessment and the risk analysis. The description can be structured into four parts: 1) project background; 2) interested parties; 3) related projects/activities; and 4) critical preconditions/assumptions and uncertainty factors.

4.3.2 Objectives and outputs

Often project objectives are defined using an “objective tree” based on a needs assessment and results in an means-ends graphical illustration where lower level means (outputs/deliverables) are linked to the higher-level ends (overall and immediate objectives) they support. Using a graphical technique to develop the relationship between output and objective supports the creation of a shared understanding. In this process several of the analyses mentioned in Section 4.2 have to be consulted and refined. It is important to maintain a creative process where different and also untraditional solutions are identified and discussed openly before narrowing down on specific outputs. Establish clear criteria for evaluating and prioritizing between potential outputs.

Indicators are defined for monitoring project impact (changes in the situation), effectiveness (if project objectives have been achieved) and efficiency (if resources have been used in the best possible way). Indicators should be formulated in a “SMART” manner, indicating that they should be Specific, Measurable, Accepted, Realistic, and Time-bound and therefore possible to monitor and objectively verify.

Project management theory identifies disagreement on project objectives as one of the most common reasons for project failure. Thus, it is important to engage the partnership participants in an open and frank discussion on project objectives. Creating a shared vision – an agreed-upon image of the situation at some stage in the future – is an important starting point for adjusting the expectations and for developing realistic objectives. Agreeing on objectives can be difficult due to different interests and perspectives, and partners may also try to change objectives in the course of project execution. Creating a broad consensus on project objectives and main outputs among faculty staff and department leadership is an important means of anchoring the project institutionally, thereby making the project more resistant to scope creep – a situation where participants wish to expand the project’s outcome beyond the original project definition.

Maintaining an ongoing dialogue throughout the project life cycle on project purpose and objectives is important. Consider jointly and carefully the realism of the objectives and discuss within the partnership what the project is not going to do, in order to avoid false expectations. Also, discuss and agree on principles for prioritizing among activities if changes are made in project scope, resources or time frame.

The result of the objective setting stage is the definition of the main task areas to be addressed by the project, and that specific outputs related to each task area have been identified.

4.3.3 The resource frame

Project resources may come from many different sources, e.g. the project core budget, in-kind contributions from North and South institutions, external resource persons, NGOs, governmental agencies, and local university grants. Partners should discuss and map the multiple types of resources that can play a role in capacity building including physical, financial, human, intellectual, and relational. Upwards anchoring in North and South universities is important as a means to clarify what resources these institutions can provide. Partners should discuss to what extent they will use the RCB

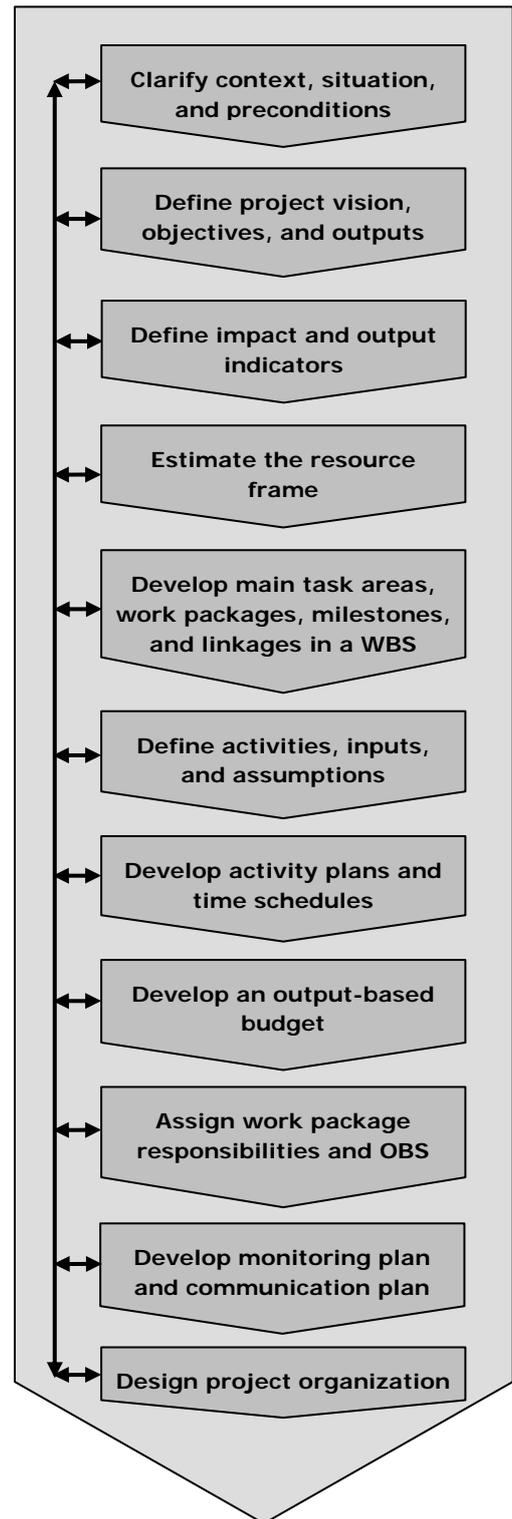


Figure 3. The master project planning process.

project as a lever for attracting additional funds. In addition, the result from the interest analysis can provide information on potential external collaborators that might contribute in-kind or financial resources.

4.3.4 Planning the main processes

Once the project objectives, main task areas, and related outputs have been defined, the partners can engage in the process of elaborating an overall plan indicating the main processes needed to produce the outputs. Creating a shared understanding of the plan can best be done by doing the planning together. On the other hand, no methodology guarantees true involvement and acceptance of the result of the planning. Designing the planning process together will support applicability, ownership, and involvement. Often, development-related projects have used the LFA since this has been required by donors. The LFA provides a clear and concise explanation of the relationship between key components of a project: Input, activities, outputs, outcomes, and overall objectives. Moreover, the LFA matrix identifies indicators for monitoring and the assumptions and preconditions on which the planning is based. See Appendix 2 for a short introduction to the use of the LFA matrix.

Irrespective of the approach chosen, the partners should consider applying some sort of structured approach that facilitates communication and clarity of plans, and the complexity of the planning approach should correspond to the project execution complexity. Some projects are relatively simple and do not require much coordination of activities. In more complex projects, the planning process should as a minimum include:

- Development of a detailed *work breakdown structure* (WBS), i.e. a means-end illustration specifying *work packages*⁸ and specific activities in each main task area
- Elaboration of a *milestone*⁹ plan identifying key stages throughout the planning period for each main task area to be used for coordinating interdependent activities in different task areas and for monitoring project progress
- Elaborate work package *activity plans* and *time schedules* (e.g. in the format of a Gantt chart) sequencing main activities and milestones

Partners should be realistic and use experiences from similar activities or projects to predict the time factor. Activities may take much longer than expected and plans should be flexible and include *slack*¹⁰. Flexibility can be incorporated in terms of timing, funding, and alternative actions.

An important part of the planning process is to elaborate a plan for project management activities – a *process action plan* (PAP). The PAP should be flexible and based on realistic and shared ambitions and goals rather than a rigid set of rules. The PAP includes activities such as: Steering committee meetings, planning workshops, monitoring activities, budget meetings, accounting updates, and evaluation workshops. The PAP is used to ensure that project participants have a common understanding of the planned project management activities. A detailed PAP is typically developed one project management phase ahead. The plan is used to structure the ongoing dialogue on management activities and changes to planned activities. The PAP can be constructed as a table containing activity type, time, roles and responsibilities, and expected outcomes.

⁸ A *work package* is defined as a subset of a project that can be assigned to a specific party for execution.

⁹ A *milestone* is a scheduled event signifying the completion of a major deliverable or a set of related deliverables. A milestone has zero duration and no effort - there is no work associated with a milestone.

¹⁰ *Slack* is defined as “the time you can postpone an activity without delaying any subsequent activity dependent on the output from the first activity”.

4.3.5 Roles and responsibilities

Project managers emphasize that a clear division of roles and responsibilities is important to support implementation. An organizational breakdown structure (OBS) can be used to distribute organizational responsibility for the major activities or work packages in each main task area. At the individual activity level a responsibility matrix listing specific activities can be used to establish individual participants' roles, e.g. as work package responsible, participant, or contributor. Based on the OBS and responsibility matrix, the main resource budget is developed indicating the distribution of man-hours to activities and institutions.

If the project involves inter-organizational collaboration, defining roles and responsibilities becomes even more important. Since the organizational concept may deviate from the participants' normal operational mode, an explicit definition of management functions is useful. This is an opportunity to focus on differences in organizational cultures and make explicit mutual expectations regarding collaboration procedures. In projects involving more than one South institution, distribution of responsibilities and roles among South participants can become complex and implications of the distribution of power and authority should be considered.

Discuss role expectations – being project responsible, project manager, or project coordinator may signify different things to different people. Integrating a project management training course into the start-up phase and jointly developing job descriptions can facilitate creation of a shared understanding of responsibilities and expectations associated with different roles.

In universities, a project culture may exist where individual projects more or less exist as autonomous units with little central coordination or influence from the department leadership and projects may develop into "project islands". RCB projects should consider the local project culture when designing roles and responsibilities.

In some cases, ENRECA projects have successively handed over decision making responsibility to their partners as a project progresses through the project life cycle. Such transfer of responsibility should be carefully discussed and planned in good time since rapid changes in roles and responsibilities can be a challenge to all involved partners.

4.3.6 Monitoring and evaluation system

The terms "evaluation" and "monitoring" are often mixed. In this context, evaluation is considered a periodical activity where fundamental questions are asked about the overall process and direction of the project. Monitoring is a more continuous process where data are collected through formal and informal processes to generate insights in ongoing performance (IFAD 2002).

The project monitoring and evaluation (M&E) system is a tool for project managers to ask questions about project relevance, effectiveness, efficiency, impact, and sustainability. A formal project control process may consist of: 1) defining a baseline plan; 2) setting up the M&E system; 3) measuring progress and performance; 4) comparing plan against actual progress; and 5) taking action. A range of benefits can be associated with M&E and monitoring project activities can support partnerships by (IFAD 2002):

- Providing information needed for day-to-day decision making
- Providing key stakeholders with information needed to guide the project strategy towards achieving goals and objectives
- Providing "early warning" of problematic activities or processes that might need corrective action
- Helping empower primary stakeholders by creating opportunities for them to reflect critically on the project's direction and help them decide on improvements
- Helping to build understanding and capacity amongst project participants

- Motivating and stimulating learning amongst those involved in the projects
- Assessing progress and enabling accountability requirements to be met

Establishing a baseline for monitoring project progress helps participants focus attention on what is considered to be important areas for improvement. By using SMART indicators, an M&E system can compare the actual implementation against the master project plan (baseline) to identify if the project is progressing as planned and whether its implementation is resulting in the planned impacts.

A number of project documents can benefit from the establishment of an M&E system. Documents related to the ongoing monitoring of project performance include: The annual report, coordinators periodically progress report, occasional activity related progress reports, Masters’ and PhD students’ progress reports, and budget reports. Although difficult to monitor, attention should also be paid to the “softer” elements in the collaboration. It is important to monitor “softer” project outputs or impacts, e.g. work climate, participants’ expectations, collaborative environment, involvement, and engagement. Monitoring South partner’s in-kind contribution can provide both partners with a more realistic picture of the consequences of the project and help focus on whether resources are used efficiently.

Monitoring can be linked to a set of overall long-term performance indicators. The performance indicators in Box 7 are used by a Danish institution and their South partners when a baseline study is carried out as one of the first steps when establishing a new collaboration. These indicators are then monitored on an annual basis to evaluate the general performance level of the institution.

Box 7: Performance indicators for a RCB project

As part of the needs assessment of a South partner institution Centre for Health Research and Development at University of Copenhagen (DBL) introduces a number of performance indicators that are assessed in the initial stage of a project and periodically monitored during the project life cycle. Indicators include:

- Annual number of articles
- Number of “external services” (control activities, consultancies, participation in professional committees, etc.)
- Evidence of procedures whereby the institution converts research findings into appropriate “low-jargon” policy briefs, which are subsequently disseminated to relevant stakeholders
- Evidence of level of satisfaction of main external stakeholders (e.g. students, ministry, relevant international agencies)
- Evidence of training activities (e.g. target groups, time consumption)
- Number of occasions where permanent scientific staff members gave external lectures (or facilitated workshops) last year
- Patents obtained
- Patents pending

4.3.7 Communication strategy

During the preparation phase, the partners should develop a communication strategy for internal and external communication. Designing an internal communication strategy identifying roles and responsibilities and formats in relation to project reporting and communication helps clarifying mutual expectations.

The nature of the communication strategy reflects the scope of the project. Communication needs are identified through the stakeholder and risk analysis. RCB projects’ communication strategies typically include two elements: 1) a stakeholder communication strategy; and 2) a dissemination strategy.

An Internet website, public seminars, end-user workshops, working papers, and newspaper and journal articles are typical elements in a stakeholder communication strategy. A general project newsletter published every quarter or half-yearly and distributed to main stakeholders is often used. E-mail newsletters can be integrated into website solutions. In many cases, a hard copy newsletter is the most appropriate choice for reaching local stakeholders.

The dissemination strategy aims at ensuring that research results are communicated. An example of a dissemination strategy for a capacity-focused project working in an institution without any previous publications tradition is shown in Box 8. In this project, the focus was on developing a publishing culture in the South institution. By establishing the venues, making it reachable for participants to publish, and by creating incentives the publishing strategy managed to help the involved South institution to establish its own local publishing platform.

An easily accessible inspiration for researchers on communication issues is the online *Toolbox for researchers*¹¹ published by IDRC. The toolbox provides instructive material on communication issues, such as how to build a communication strategy, make a policy brief, write for the web, and make an effective presentation, to support researchers in better achieving their communication objectives. Another source of inspiration regarding communication planning is DFID's *Successful communication: A toolkit for researchers and civil society organisations*¹². This handbook presents communication tools, specifically geared towards the needs of researchers in civil society organizations.

Box 8: A publication strategy designed to establish a publishing culture

The RCB project Forest Management in Bolivia (FOMABO) focused on building local research capacity in Bolivia and publishing in Spanish for Bolivian end-users had priority. The following strategy was developed to support this objective:

Principles

- The project wants to develop a culture where all research results are published
- In Phases 1 and 2, the project will establish and develop publishing venues and three types of publications: The technical series, the scientific series and other publications
- Responsibility will be transferred to the South partner during Phase 3
- All research support (Master thesis, small research project grants, etc.) is made dependent on a final publication in a predefined standard format (the last 30 % of the grant is only paid when the publication is approved by an appointed supervisor)
- All authors should receive the needed support for planning and writing publications (scientific writing courses, research planning courses, special supervisors, review by North partner, etc.)

Tools

- All publications are published as web-publications on the project's and South partner's website
- Good quality scientific and technical series papers are printed in hard copy to be distributed among stakeholders and to be used in teaching (only publications approved by the Scientific Committee)

Incentives

- The additional effort associated with the publication is rewarded according to publication type: International peer reviewed articles (1000 USD), scientific series papers (300 USD), and technical series papers (150 USD)

¹¹ See: http://www.idrc.ca/en/ev-131735-201-1-DO_TOPIC.html

¹² See: <http://www.odi.org.uk/resources/details.asp?id=155&title=successful-communication-toolkit-researchers-civil-society-organizations>

4.3.8 Organizational structure

Once the main processes and the participants' roles and responsibilities have been defined, the *project organization* can be designed. The organizational design should be considered as a means for supporting project objectives, and projects with different management needs may benefit from different organizational designs. The classical project structure includes a steering committee (including upper-level decisions-makers and project owners¹³), the grant holder/principal responsible party (PRP), responsible party at the partner institution(s), a management committee¹⁴, North and South project manager(s)/coordinator(s) responsible for daily management, relevant reference groups (e.g. professional experts and stakeholders¹⁵), project office staff in South, and project participants.

Well-functioning steering committees can provide important overall strategic guidance on project planning, implementation and resource spending. Moreover, steering or management committees can ensure upwards and outwards anchoring and support information flow and inter/intra-institutional collaboration. It is recommended that the role and authority of the steering committee are clearly defined. Committee members can play an important role as ambassadors at the university top-level management and including university-level support unit representatives, such as the research department or international relations office in the committee, can be useful in order to promote and build support for the South partner. Establishing a scientific committee with external colleagues can be a way to integrate with other players in the NIS thereby supporting networks and inter-organizational collaboration.

Partnership projects often rely on loose networks rather than clearly defined project teams. Moreover, the collaboration is often based on "virtual teams" rather than teams placed in the same location. Such conditions need to be taken into consideration in designing the project's organization structure and its coordination processes.

Projects should consider the optimal degree of integration with the South partner's existing organization taking into account administrative requirements and capacity development objectives. Unprofessional administration can easily lead to misunderstandings and mistrust. Effective project administration is often highly prioritized and this may lead to the establishment of independent administrative units and employment of "outsiders" as accountants and project coordinators/managers. Projects may look for trained administrative personnel who have worked for international organizations with similar requirements as those defined by the North institution or the involved donor. This may ease the administrative procedures considerably and facilitate accountability and compliance with donor requirements. Being situated in an independent project office referring directly to the North PRP or project manager can also provide local administrative staff with the necessary strength to stand against local interests beyond the project scope.

On the other hand, it is often recommended to avoid parallel structures and the opportunity to manage an international project is an excellent type of institutional capacity building, and the more the South institution is allowed to integrate project administration into existing structures, the more experiences are obtained and retained. Integration with existing structures can also be a more cost-efficient solution than an independent office. Moreover, building on existing capacities and the inclusion of South faculty staff in project management may be the ideal solution for creating ownership and sustainability. But South employment structures, promotion mechanisms, and internal power relations may also counteract

¹³ In a traditional project management context the project owner is a representative of the upper management level of the company or organization. The PRP is normally considered the project owner in the Danish university context.

¹⁴ Some projects use a management committee to anchor the project with the South institution and important stakeholders. Such a committee meets more often and discusses more operational issues than are discussed in the steering committee.

¹⁵ A scientific committee and an end-user panel are examples of reference groups.

integration into existing structures and under such circumstances it may be preferable to work with a parallel structure, as it provides flexibility and a more dynamic environment for project implementation.

Some projects have a North researcher/project coordinator staying at the South institution during one or more project phases. Project participants should discuss the benefits and disadvantages of having a North coordinator versus a local coordinator situated in the South institution and agree on a model that accommodates both North and South needs. No uniform recommendation can be given. Staying in each other's countries and institutions for prolonged visits can be a valuable experience. If the initial South institutional capacity is low, it is recommended that a North coordinator is staying in the South institutions for a longer period of time in the beginning of the collaboration. If the South partners are capable of managing the project themselves, it may on the other hand be counterproductive to have a North coordinator spending too much time in South.

Some projects employ non-researchers as project managers to manage the administrative part of the project. In some cases, North institutions have employees managing administrative aspects of several projects at the same time, and some projects have recruited part-time employees to manage a specific project. In larger projects, aiming to separate general administration and research management may be a constructive solution to the problem of researchers being involved in tedious administrative duties instead of being able to concentrate on the research collaboration.

Finally, RCB projects may also opt for joining larger research consortiums where administrative resources can be pooled to establish joint project facilities where accountants and other administrative personnel can be shared, achieving benefits of scale and inter-project coordination.

4.3.9 The main budget

Based on activity descriptions, the resource frame, division of roles and responsibilities, and the project organization, the partners can now finalize the main budget. Using an activity-based budget is recommended, since this provides a clear structure for budgeting, distribution, and monitoring. Each work package is allocated a separate budget and the work package provides a *control point* used for financial monitoring. In developing the budget, the information from the risk assessment should be taken into consideration - time slack may have to be accompanied by some degree of financial flexibility.

At the initial stage the budget will typically be developed through a top-down approach estimating an approximate level of costs associated with each activity and finally being aggregated to task area and output level. Cost estimation can be based on experiences from other projects with similar activities. The exact costs are often difficult to obtain and exchanging information with colleagues or other projects experienced with the specific country or institution is recommended. The budgeting process is iterative, reflecting the adjustment of project ambitions to the expected resource frame. Many adjustments may have to be made, and it is recommended to use a spreadsheet model that lists all activities/work packages and their associated costs allocated to major cost categories, e.g. salary, travel costs, equipment, materials, and dissemination, depending on the budget format used. Such a model can be used to estimate consequences at the aggregated budget level of adjustments on the activity level.

An unclear or uneven distribution between partners or within a department can be problematic as a project will inevitably become a power base that may impact existing relations in the South institution.

4.4 Project sustainability

Sustainability is concerned with the ability of the project to ensure long-term impact. A strategy for achieving sustainability should be developed from the initiation of the project. Partners should openly discuss and agree on what sustainability implies and how it can be obtained under the specific conditions of the partnership. Box 9 shows the most common sustainability strategies in Danish RCB projects according to the project managers.

The inclusion of South partners in national and international research networks is seen as the most important means to achieve sustainable impact. Inclusion in networks can be supported in many ways, e.g. by enrolling South PhD students in North universities; funding participation in international courses, seminars, and conferences; and providing grants for visiting and working at other institutions. Facilitating South-South research collaboration is an important means of creating networks. Establishing cross-institutional research centres or department research units is a strategy applied several projects. Emphasising that South partners publish internationally is another way to promote South partners and support their integration with international networks. Dissemination of research results in national and international journals and making sure that research results reach the end-users enhance engagement and commitment among the partners. Public relations initiatives, e.g. websites and brochures, make South partners more visible and can facilitate outwards-orientation and create new links to users of research and education.

Ensuring that the South researchers or institutions have the skills and reputation necessary for attracting external post-project funding is an important means of sustainability. This is supported by providing training and support for writing project proposals and applications as well as by developing the partner's fund seeking capacity. Small research grants for South researchers with well-defined application procedures and evaluation criteria can be used for this purpose. Linking small research grant programmes with research design and proposal writing capacity building activities can create a high motivation for learning.

If the partnership aim to continue after the present funding has ceased, project participants need to be conscious about developing opportunities for future collaboration. Long-term engagement (project life cycles from 9 to 12 years) is an important factor for facilitating continuation of collaboration as it supports development of personal relations between project participants. Partnerships also have to pay attention to the integration of research topics with the strategies of the South institution to ensure future prioritisation and resource allocation.

Box 9: Typical elements in sustainability strategies for research capacity building projects

- Support your South partner's inclusion in international research networks.
- Support your South partner's inclusion in national research networks.
- Establish formal research departments or centres at South institutions.
- Develop your South partner's ability to develop project proposals.
- You and your partner(s) aim to engage in common long-term arrangements after the RCB project has finished.
- Support improvement of your partner(s) public image, e.g. through a website and publications.
- Develop your South partner's fundraising capacity.
- Seek other funding for continuing your partnership.
- Ensure that objectives of each project phase are reached before the closure of the phase.
- Integrate your project management into existing organizational structures at your South partner's institution.
- Support development of your South partner's institutional strategies and policies.
- Stepwise reduce your South partner budget frame during the final phase.
- Enhance development of your South partner's administrative procedures.

Efficient project management based on a common vision and clear objectives also supports sustainability. Direction and leadership is needed to maintain momentum and change. This is supported by strategies directly related to the project management such as ensuring that objectives are met for each project phase and slowly phasing out the financial support creating a necessity for alternative solutions.

In some projects, the long-term sustainability is highly dependent on institutional change in the South institution, and projects should identify if South universities can establish concrete incentives, e.g. a financial reward for publishing research, from the project start-up as an indication that the RCB effort is given priority.

5 Start-up/inception phase

Project management checklist for the start-up/inception phase

- √ Establish an adequate, but simple and flexible, management framework to facilitate detailed planning
- √ Perform inwards anchoring with a focus on establishment of personal relations and effective communication practices
- √ Establish and implement management procedures from the beginning of the project execution
- √ Establish and maintain a project management file (PMF) containing all project management relevant information
- √ Establish and maintain a project management logbook (PML) containing all planned activities used for ongoing communication and follow-up
- √ Initiate activities on a manageable scale and develop further collaboration based on initial experiences
- √ Develop a detailed monitoring and evaluation (M&E) plan
- √ Establish and document financial management and accounting procedures and ensure that the necessary capacity exists

The project *start-up/inception phase* aims at creating the conditions for efficient cooperation among the project participants. In large phased-divided projects, each major execution phase can be initiated with a start-up phase to focus the effort and introduce new participants. Since most participants are often first really involved in the planning during the start-up phase, project analysis and master project planning should be reviewed involving participants in developing detailed plans. In the start-up phase it is important to perform the necessary anchoring activities to ensure that stakeholder groups are addressed and their concerns integrated in the detailed project plans.

An external facilitator, e.g. an experienced colleague or professional facilitator, can be used for managing start-up workshops. Workshops should be organized with a focus on dialogue and involvement. Meetings and workshops should be reported in minutes made available for project participants.

It is recommended to use small-scale activities to initiate and practice partnership collaboration and identify strengths to be utilized or weaknesses to be addressed. Partners should focus on establishment of efficient communication practices among project participants. The start-up phase should allow North and South participants to develop their personal relations in order to facilitate future collaboration and communication.

Project planning can be seen as an institutional capacity building effort in its own right. By involving staff members in the planning and M&E activities, RCB projects contribute to develop the partner institution's general management competencies.

5.1 Detailed planning

Reviewing the master project plan and ensuring that participants' detailed knowledge is integrated in the plan help identify the best solutions and create a shared understanding of the project's context, preconditions, objectives, outputs, main processes, and organization.

5.1.1 Process action plan

The PAP for the start-up phase is jointly revised and adjusted. The activities in the start-up phase include: Planning meetings, start-up workshops/meetings, establishment of a project management file (PMF), and elaboration of a project management logbook (PML). The PMF is a document, a data base or a website, containing all management relevant information, e.g. analysis, plans, meeting minutes, etc., documenting the basis for the project management throughout the project life cycle. The PMF is used to facilitate information exchange, project transparency, and documentation of the basis for decision making. The PML is a document listing all planned activities used for ongoing coordination and follow-up.

5.1.2 Detailed activity plan

During the project start-up a detailed time and resource plan for the next planning period is elaborated. Rules and regulations for project execution are agreed upon and quality control processes planned. Basic rules are needed, but avoid rigid setups and administrative bureaucracy. Based on the approved budget frame a detailed budget suitable for subsequent controlling is developed. In cross-organizational teams, the start-up phase should also include an inwards anchoring effort supporting project cooperation.

If possible, use existing planning formats in South institutions when developing detailed work plans, budgets, and procurement plans to support training in post-project planning practices. Ongoing activity planning involves defining activities, the research and capacity building methodologies to be applied, a detailed budget, responsibilities, and a time table. Plans should clearly define measurable and verifiable results that can be captured by, and assessed through, the M&E system.

Research management involves the development of a research protocol or plan. In some cases, the South universities already use standard formats. In other cases, the RCB project has to introduce such formats. Several institutions provide material that can be adjusted and used according to specific needs of the partnership (see Appendix 1).

5.1.3 Communication plan

Based on the communication strategy developed in the preparation phase, a communication plan is developed during the start-up. A communication plan can take the format of a flow chart showing who should provide which information to whom at what time and in what format during the project cycle. Practices regarding progress reports, annual reports, budget plans, accounting statements, PhD students' progress reports, and PMF and PML updating should be specified in the communication plan. Providing and processing information takes time and communication procedures should be kept simple and based on actual needs.

5.1.4 Monitor and evaluation plan

In the start-up phase, participants develop a detailed M&E plan based on the general M&E system outlined in the master project plan. The M&E plan specifies performance questions, information needs and indicators. Discussing and defining performance indicators, the monitoring plan and data collection methodologies as part of the project start-up can help partners clarify project objectives and adjust expectations. Collecting data for monitoring is dependent on good communication and reporting practices. Having developed jointly the indicators for monitoring can help focus attention on the kind of information that facilitates the monitoring task and ensures that information will be obtainable.

Processes and events where participants can reflect on M&E results have to be planned. Such processes and events include: Periodical activity review meetings, progress reports, regular participatory evaluation workshops, and ad hoc evaluations of critical activities. Detailed planning should indicate the means and

responsibility for communicating the results of such processes among partnership participants and stakeholders. Capacity building can be necessary in order to ensure that participants can implement M&E plans, communicate the results, and follow-up on conclusions.

The website: *Participatory Planning Monitoring & Evaluation - Managing and Learning for Impact*¹⁶, hosted by Wageningen International, offers a rich source of literature on M&E. An example is a comprehensive introduction provided in IFAD's *A Guide for Project M&E: Managing for Impact in Rural Development* (IFAD 2002)¹⁷. This guide introduces the concept and planning tools as well as a range of data collection methods and techniques. The guide suggests using "performance questions" in relation to each objective level (overall objectives, purpose, and outputs) to identify indicators useful for monitoring whether the project is achieving the planned impact. Performance questions include questions, such as: Who have benefited from improvements? Who have not benefited? What is the likelihood that improvements will be sustained? What are the unintended negative or positive impacts? Which type of capacity has been created? Who have benefited from which type of activities? Who have been excluded? How many people have obtained these capacities? Indicators suitable for answering these questions will be useful for assessing project impact.

5.2 Administration

When project participants jointly develop management regulations and norms it can help clarifying mutual expectations and support transparency. Developing such regulations in a joint workshop may be a tedious endeavour, but it allows participants to have a say in the process and an opportunity to participate in the accompanying discussion that may address project objective and purpose, the donors policies and administrative regulations, South partner's existing norms and regulations, roles and responsibilities, authority, accountability, transparency, monitoring and follow-up, and ethical aspects of distribution of support among different participant groups. In this way development of administrative regulations can become an important learning experience for both North and South participants in the partnership.

The workload and knowledge needed for establishing an independent project administration should not be underestimated. Becoming sufficiently acquainted with local administrative and legal procedures may take much more effort than expected. Partners should ensure sufficient time and resources for getting practicalities in place before engaging in actual project activities.

Transparency is important and budgets should be made accessible for all project participants. North and South budget and accounting systems rarely coincide, and a parallel system may have to be established. Alternatively, modern accounting software can solve this problem by allowing different output formats to be produced from the same basic accounting data. Managing the project finances through a separate bank account is recommended to enhance accountability, transparency and flexibility. Documenting financial procedures and norms is recommended to avoid misunderstandings in relation to financial management. Typically, funds are transferred from North to South based on periodical requests according to the advance in project execution and expenditure.

The PRP should appoint a certified and internationally recognized auditor and involve the auditor company in ensuring that accounting procedures are complying with national standards and donor defined requirements. Training of project accountants can be important, but enhancing the general awareness of accounting principles and systems among department staff and management may also be useful.

¹⁶ See: <http://portals.wi.wur.nl/ppme/?Home>

¹⁷ See: <http://www.ifad.org/evaluation/guide/>

6 Coordination phase

Project management checklist for the coordination phase(s)

- √ Facilitate an effective and ongoing communication through allocation of sufficient time and resources
- √ Discuss mutual expectations regarding communication practices and agree on “best practices”
- √ Organise the project execution in order to facilitate monitoring and ongoing follow-up activities
- √ Inquire about the partner’s management and leadership cultures, and take these into consideration in the project execution
- √ Reflect on and discuss different leadership and management approaches and consider which approach is suitable in which situations
- √ Develop facilitation skills and encourage efficient meeting management practices

Project coordination involves the project management activities carried out in parallel with the actual implementation of project activities, in order to support participants’ execution efforts and maintain result-orientation. The main coordination activities include: Communication, monitoring, and ongoing leadership. Instruments for organising coordination include: Meetings for planning and evaluating the project management; project management reports; PMF and PML; and project review workshops. During this phase, project managers deal with both execution activities and project management, but it is important to make a clear distinction between the two types of activities.

6.1 Communication

Communication and information sharing is important for effective project coordination. The exchange of information should be supported by allocation of sufficient time and resources. Project managers should focus internal communication effort on critical phases in the project, e.g. start-up, phase transitions, and important decision making moments.

The principal communication effort is outlined in the project’s communication strategy, developed in the project preparation phase. During the start-up and coordination phases specific formats and practices for implementing the communication strategy are developed and documented.

Project participants should have access to all relevant project management and decision making information, e.g. through an easily accessible PMF or a CMS system¹⁸. Ensuring that participants are updated on project purpose and new developments and aware of opportunities offered by the project is important. A short summary of the project document, internal newsletters, PhD students’ monthly progress reports, a project notice board, and a “book of project meeting minutes” accessible for interested parties are some of the means used for internal communication.

It is recommended that partnership participants discuss openly mutual expectations regarding communication practices and agree on “best practices”. Communication is affected by culture, technology, and the number of participants involved in project activities. Working partly as virtual teams is a challenge for North-South partnerships, but ongoing communication is improved by the developments in information technology, for example, some project managers conduct weekly or monthly project staff and PhD supervision meetings using VoIP (Voice over Internet Protocol) services. An agenda is circulated by e-mail some days before and the PMF is jointly reviewed and updated by the staff in South and North.

¹⁸ A content management system (CMS) is a computer application used to create, edit, manage, search and publish various kinds of digital media and electronic text (See: http://en.wikipedia.org/wiki/Content_management_system).

6.2 Monitoring

The monitoring carried out during the coordination phase(s) is the basis for a learning process aiming at optimizing the execution effort. Implementing the monitoring plan developed in the start-up phase involves continuous gathering of performance data and comparison with the expected progress according to the detailed action plan. Such comparison may reveal that the execution of project activities is ahead or behind the time schedule, or/and that the resource input used for achieving the obtained results has been under- or overestimated. This information can help project participants adjust their execution effort in order to keep the project on track and efficiently reach project objectives. Thus, the monitoring effort leads to a process of incremental adjustment of action plans in order to optimize performance. Due to the uncertain nature of research activities, many elements in a RCB project's plans are difficult to estimate precisely, and plans need to be flexible and possible to change during execution. But monitoring data will only help the project participants if used in structured critical reflections, asking questions such as "Why?" "So what?" and "Now what?" Reflections can happen in any forum – formal or informal – with key individuals and groups, with project and partner staff and primary stakeholders, in steering committees or management committees (IFAD 2002). Projects should outline in the M&E plan and in the PAP how they will integrate these learning events during the project execution. In addition to the adjustment of detailed action plans, the project should also aim at continuously revising and improving the monitoring effort by adjusting the monitoring system and M&E plan as practical experience is gained during implementation.

6.3 Ongoing leadership

RCB projects are typically managed by researchers whose main interest, naturally enough, is the research collaboration. Therefore, there is a risk that project management related issues can be neglected. This could be avoided by allocating sufficient time for planning and ongoing management. Moreover, discussing project management in a concrete context, such as a joint management effort, can provide a legitimate opportunity to address general aspects of professional administration and leadership.

Project practices in relation to planning, anchoring, monitoring, and evaluation will sink into an organization and be put in use in other activities. From this perspective, addressing management and leadership issues becomes an important vehicle for enhancing organizational performance.

6.3.1 Leadership cultures

Partnerships involve collaboration between equal partners, and experiences have shown that greater success is gained, when both scientific leadership as well as management responsibilities are shared. Strong leadership is necessary for success as it provides direction and helps maintain momentum. Experiences also show that projects benefit from decision making processes based on an open, honest, and trustful dialogue through agreed upon and explicit processes anchored in the institutional setting.

Leadership is not a well-defined concept, and different cultures have different expectations to project managers. Different kinds of projects, different key individuals, different activities, and different stages during the project life cycle call for different kinds of North and South leadership. Discuss leadership and management styles openly and with respect for differences. Understanding the partner's perspective is a prerequisite for optimising partnership design and management strategies.

It can be challenging for a North project manager/coordinator to choose an appropriate kind of collaborative style. Projects should consider the appropriate balance between control and sharing responsibility, and how this best can be supported by project design, management strategy, and management behaviours. Consider how a project culture, which is empowering participants to take initiative, is developed, e.g. where it is acceptable to make mistakes and learn from experiences. Managing

through clear objectives, agreed upon outputs and approved plans is recommended when the partners want to delegate the tasks among participants.

Work proactively to anchor the project with the South leadership. In general, it is recommended to ensure that the local responsible party is a leader at a sufficiently high level. It is important that South partners demonstrate leadership and willingness to change. Maintaining an ongoing dialogue with the department director, dean, or vice rector/chancellor can be very useful for the project. To ensure ownership and build leadership capacity, partners should make sure that project leadership is shared between the involved institutions, and it can be important to ensure a shared decision process that balance participants' power, not only North-South, but also South-South, in a multi-participant set-up.

Emphasize flexible project management to accommodate the dynamics and uncertainty associated with research activities. Partnerships are not static and expectations, relations, and plans change over time. Consider where flexibility is needed and where not, e.g. in relation to more predictable capacity building tasks. Create time for project managers to reflect on their management role and the organization of the project.

The kind of leadership that the partnership leaders – both North and South leaders – should exercise during the different stages of a project's life cycle should rather be a conscious choice than a knee-jerk reaction. The Situational Leadership concept (see Box 10) is a useful basis for framing a discussion on leadership in a capacity building context. The philosophy behind situational leadership is that management behaviour should consider both the development level of the "followers", and the leadership style in terms of the balance between direction and support provided by the leader to the "followers". The model obviously relies on a Western concept of leadership and is not necessarily transferable to a specific South context, but it can be a starting point for a discussion on leadership as an inevitable element in the partners' interaction.

Project managers need competencies in facilitating collective decision making and learning processes. The ability to facilitate that participants identify what they themselves consider to be the right solutions in their search for improvements is important in a RCB project. This implies that project managers must be able to design, plan, and facilitate group decision processes.

According to *The Community Tool Box*¹⁹, developed by University of Kansas, good facilitation implies:

- Understanding the goals of the meeting and the organization
- Keeping the group on the agenda and moving forward
- Involving everyone in the meeting, including drawing out the quiet participants and controlling the dominating ones
- Making sure that decisions are made democratically

In planning a meeting process, a facilitator should focus on the climate and environment, logistics and room arrangements, and ground rules. Good meeting management involves creating a structure, providing clarity, ensuring participation, and arriving at decisions. *The Community Tool Box* provides a discussion of a range of facilitator skills and tips regarding the facilitator's personal behaviour and how to deal with disrupters.

¹⁹ See: http://ctb.ku.edu/en/tablecontents/sub_section_main_1154.htm

Box 10: Situational leadership

The Situational Learning model proposed by Blanchard et al. (1985) argues that *leadership style* should be situational and adjusted to the needs of the “follower(s)”. The leader should analyze the situation and adopt an appropriate *leadership style*. Leadership behaviour is characterised by four styles in terms of the amount of direction and support that the leader provides for the follower. The right leadership style depends on the person being led. Followers are characterised by their *development level* in terms of their competences and commitment. Development levels are also situational and the same person display different development levels depending on the task addressed.

Leadership styles

- *Directing/Telling Leaders* define the roles and tasks of the follower, and supervise them closely. Decisions are made by the leader and announced, so communication is largely one-way
- *Coaching/Selling Leaders* still define roles and tasks, but seek ideas and suggestions from the follower. Decisions remain the leader's prerogative, but communication is much more two-way
- *Supporting/Participating Leaders* pass day-to-day decisions, such as task allocation and processes, to the follower. The leader facilitates and takes part in decisions, but control is with the follower
- *Delegating Leaders* are still involved in decisions and problem-solving, but control is with the follower. The follower decides when and how the leader will be involved

Development levels of followers

- *Low Competence, High Commitment* - They generally lack the specific skills required for the job in hand. However, they are eager to learn and willing to take direction
- *Some Competence, Low Commitment* - They may have some relevant skills, but will not be able to do the job without help. The task or the situation may be new to them
- *High Competence, Variable Commitment* - They are experienced and capable, but may lack the confidence to do it alone, or the motivation to do it well or quickly
- *High Competence, High Commitment* - They are experienced at the job, and comfortable with their own ability to do it well. They may even be more skilled than the leader

The theory prescribes that leaders should choose a style going from directing towards delegating as followers develop from low competence towards higher levels of competence.

(Source: http://en.wikipedia.org/wiki/Situational_leadership_theory)

7 Evaluation phase

Project management checklist for the evaluation phase(s)

- √ Focus on output and impact indicators
- √ Use external evaluators as sparring partners when discussing how to improve project performance
- √ Ensure that evaluation data and results are communicated to project participants
- √ Use evaluation results to revise and update the master project plan and detailed plans
- √ Ensure that project management issues are addressed and that results are used to enhance performance

Project evaluation can be defined as a period in the project process where an overall assessment of project relevance, effectiveness, efficiency, sustainability, and impact is made. Evaluation is often associated with a final assessment at the end of the project, but more important are periodical evaluations throughout the project, focusing on progressive optimisation of future activities. The evaluation process typically focuses on management topics, such as project management effort, project context and objectives, the resource frame, the main processes, project organization, task distribution, execution of activity, cooperation and

decision making, and communication routines. It is recommended that evaluations focus on output and impact indicators. Evaluations are often linked to main milestones or situations where project conditions have changed significantly, and the project direction and possibilities need to be reconsidered.

A midterm evaluation can function as a midterm start-up providing orientation and revitalizing the project. The evaluation can renew and revise the focus on stakeholders, objectives, plans, and resource allocation and provide a basis for adjustment of the master project plan and detailed plans. The evaluation process is an opportunity for dialogue among partners on cooperation issues.

Different evaluation methodologies are used depending on the purpose and context. A distinction is made between *external* and *internal* evaluations. Internal evaluations are carried out by the partnership participants themselves, whereas external evaluations are undertaken by outsiders, e.g. consultants. External evaluations are typically initiated and financed by the funding agency, but can also be initiated by the project partners. Evaluations can also be categorized as *bottom-up/participatory* or *top-down/expert-led*. In bottom-up/participatory evaluations, the project participants play a role in defining criteria and indicators for the evaluation as well as in collecting and analysing data. In top-down/expert-led evaluations, criteria and indicators are defined beforehand by outsiders, and participants are not involved in data collection or analysis. Box 11 provides an overview of the characteristics of each approach. A distinction is also made between *formative* and *summative* evaluation. Formative evaluation processes focus on participants' learning and improvement of the situation, whereas summative evaluations focus on judging past performance.

Horton et al. (2003) argue that "every evaluation of a capacity development effort should itself contribute to the capacity development effort and ultimately to the organization's performance". This objective is best obtained through formative and bottom-up evaluations.

External evaluations can provide project participants with inspiration on how to improve project performance – especially if external evaluators apply a participatory approach for defining the issues addressed in the evaluation, thereby facilitating that the obtained results is perceived as relevant by the partnership participants. External evaluators are often very experienced, and RCB project managers and administrative staff can benefit from engaging in an open and self-reflective dialogue using the evaluators as sparring partners when discussing how to improve project performance.

RCB projects can benefit significantly from conducting periodical internal evaluations, e.g. in connection with an annual project workshop gathering all participants. Deciding the focus of the evaluation and developing the indicators in a participatory manner may contribute to ensure ownership of the evaluation result, which may in turn enhance the probability that they are considered in the planning of the subsequent project phase. Participants can be involved in evaluating all the different aspects of the project, or they can be divided into groups reflecting their roles and interests to discuss sub-themes, such as accounting and administration, PhD scholarship programmes, organizational changes, teaching enhancement, research activities, and project management. Discuss and obtain participants' opinions on how evaluation results can be taken into account in the planning of subsequent project execution. Documenting the concerns raised by participants and stakeholders and ensuring that the project managers' responses are documented support transparency and accountability. Evaluations can be quite resource demanding and having a clear agreement on process design and distribution of associated work tasks is recommended.

Evaluation guidelines are provided by several donors and international agencies. A very useful resource for planning and implementing evaluations of organizational capacity is IDRC's *Evaluating Capacity*

*Development: Experiences from Research and Development Organizations around the World*²⁰. Another comprehensive introduction to evaluation is found in IFAD (2002).

	Bottom-up/Participatory	Top-down/Expert-led
Who drives the evaluation?	Project staff and other stakeholders	Donors and programme managers
Who determines indicators of programme progress?	Project staff and other stakeholders; evaluator	Professional evaluators and outside experts
Who is responsible for data collection, analysis and preparing final reports?	Shared responsibility of evaluator and participating stakeholders	Professional evaluators and outside experts
What is the role of the local evaluator?	Coach, facilitator, negotiator, “critical friend”	Expert, leader
When is this type of evaluation most useful?	When: <ul style="list-style-type: none"> • there are questions about programme implementation difficulties • there are questions about programme effects on beneficiaries • information is wanted on a stakeholder’s knowledge of a programme or views of progress 	When: <ul style="list-style-type: none"> • there is a need for independent judgment • specialized information is needed that only experts can provide • programme indicators are standardized, rather than particular to a programme
What are the costs?	<ul style="list-style-type: none"> • Time, energy and commitment from local participants, project staff and other stakeholders • Coordination of many players • Training, skills development and support for key players • Potential for conflict 	<ul style="list-style-type: none"> • Consultant and expert fees • Loss of critical information that only stakeholders can provide
What are the benefits?	<ul style="list-style-type: none"> • Local knowledge • Verification of information from key players (validity) • Builds knowledge, skills and relationships among community residents and other stakeholders 	<ul style="list-style-type: none"> • Independent judgment • Standardized indicators allow comparison with other research findings

(Based on: Zukoski and Lulaquisen (2002))

²⁰ See: http://www.idrc.ca/en/ev-31556-201-1-DO_TOPIC.html

8 Closure phase

Project management checklist for the closure phase

- √ Verify to what degree the final outputs and outcomes correspond to stakeholders' expectations
- √ Document and communicate project experiences
- √ Pass on new ideas developed during the project to relevant stakeholders

The *closure* phase is the period from when execution has finished until the project is finalized. The purpose of the closure phase is to verify whether project outputs correspond to the stakeholders' expectations and outputs have brought about changes to the initial situation, thereby creating the expected impact. Moreover, the phase should also provide participants with an opportunity to reflect on and document lessons learned. Planning meetings, plans, updating of PMF and PML, closure workshops, closure report, lessons learned documents, and steering committee meetings are the typical tools available for the project manager in the closure phase. A facilitator can be useful for conducting the closure workshop and managing the reporting and communication of workshop results.

In planning the closure activities, it is important to allocate sufficient time for an extensive dialogue ensuring that conditions are created for collective learning. It takes time to make participants reflect on and discuss their experiences in an open and trustful climate. In an ongoing partnership, the project closure may be a prolonged period of time, allowing participants to reflect and discuss experiences more thoroughly. Publishing management experience is a good way of supporting partnership reflection – especially if the writing is done in collaboration between North and South participants. Reviewing “Lessons Learned” statements made through the project life cycle, e.g. resulting from periodical internal evaluations or annual progress reports, can be a starting point for the documentation of management experiences.

The partners should verify whether the project's final results correspond to the expectations of the stakeholders. If deviations exist, project participants should engage in a dialogue with the stakeholders and investigate if post-project action can be taken to improve the situation. In RCB projects, the close interaction between primary stakeholders, e.g. students, staff members, and department leadership, makes verification of expectations and assessment of results a relatively forward task. Assessing the perceptions of other stakeholders, such as university authorities, politicians, public administrators, communities and farmers, may be more resource demanding and need to be taken into account during project planning. In long-term RCB collaboration involving several distinct project phases, verifying stakeholders' expectations and assessing results should be seen as a phase-related activity, periodically allowing projects to adjust their effort based on obtained results.

The learning obtained by the participants during the project execution should be made explicit and available for a broader audience in the partners' organizations. At the end of the project, participants realize how execution could have been made more efficient. It is important to collect participants' ideas and share such ideas with the relevant stakeholders in order that these ideas can be utilized in future projects.

It is also important to mark the official end of the project. This is an important symbolic manifestation that the project is over, and that participants can now focus on other activities. Often this is done with an event, such as a public seminar or conference, where project outputs and impacts are presented.

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Appendix 1: Recommended literature on RCB project management

During the last decades, project management has become professionalized and a number of organizations have developed frameworks and standards to support the task of managing projects, e.g. the Project Management Institute's *Project Management Body of Knowledge (PMBOK)* (PMI 2004); the International Organization for Standardization's *ISO 10006 Guidelines for quality management in projects*; and the International Project Management Association's (IPMA) *Competence Baseline* (ADPM 2005). Such guidelines are very comprehensive, but may serve as an inspiration for designing a simpler and project specific management approach.

A number of sources exist, where project managers can find inspiration for planning and practicing project management in a RCB context. For a general overview of the literature on North-South research partnerships, see Bradley (2007), who provides an excellent literature review and an annotated bibliography on the subject.

Danida's ENRECA programme has been evaluated three times: *Evaluation Report: The Bilateral Program for Enhancement of Research Capacity in Developing Countries* (MoFA 1992); *Evaluation: Enhancement of Research Capacity in Developing Countries (ENRECA)* (MoFA 2000); and *Partnership at the Leading Edge: A Danish Vision for Knowledge, Research and Development* (MoFA 2001). These evaluations include a number of interesting findings and recommendations relevant for project design and management strategies. Moreover, MoFA (2001) includes an introduction to the concept of NIS relevant for partners wishing to analyse the broader institutional context in which the partnership operates. Ilsøe (2005) has summarized the Danida findings regarding the conditions for creating successful North-South partnerships. This publication is a brief and valuable source of important insights.

HERA (2007) and KEDAHR (2001) provide examples of sector and project focused reviews. Both publications are rich sources of inspiration on issues that should be considered by RCB project managers. Thulstrup et al. (2006) evaluate the impact of Sida's SAREC programme in two Bolivian universities. The SAREC programme aims at institutional capacity building and PhD training, and the report contains interesting input for RCB projects on the complexity involved in these areas.

At the specific project level, Nyamongo and Aagaard-Hansen (2006) address the experiences gained in the Kenyan-Danish Health Research Project (KEDAHR); Johnson et al. (2009) discuss experiences from the Sustainable Development Strategies for Central America (SUDESCA) project; and Jensen et al. (2007) discuss the twinning concept and partnership experiences from a Danish-Malaysian cooperation.

The role of research in a sector programme support (SPS) context is discussed by (Schleimann 2004). Understanding the perspective of SPS staff and the context in which SPS is implemented is important in developing a fruitful interaction as it has been recommended in several ENRECA evaluations.

The Swiss Commission for Research Partnerships in Developing Countries (KFPE) has published a number of publications on RCB issues. KFPE (1998) provides a *Guidelines for Research in Partnership with Developing Countries* including a list of 11 principles of project partnerships. The list is universal and provides a good starting point for project managers who consider entering the field. Building on this work, Maselli et al. (2006) address the issue of how to improve research partnerships' impact. This publication includes a number of case studies and is a rich source of inspiration regarding factors that enable or hinder project impact. In a more recent publication, Sieber and Braunschweig (2005) address the issue of project selection for North-South research partnership programmes. Although this publication is not directed at the project level, it provides a useful inspiration for identifying decision criteria that can be helpful in the process of deciding what kind of project is aimed for as well as the type of partners to be identified.

Gaardhøje et al. (2005) address capacity building in higher education and research on a global scale and from the perspective of industry, donors and universities. Thulstrup and Thulstrup (1996) present a number of international experiences on research training for development. Issues such as brain drain, the

“sandwich model” and other scholarship models, linkage between research and education, research management and technology transfer are discussed. Thulstrup (1998) discusses RCB in developing countries and how it can be evaluated. In 2005, Nuffic (Netherlands’ organization for international cooperation in higher education) organized the conference “A Changing Landscape”. The aim was to obtain practical suggestions for making support to tertiary education and research in developing countries more effective. The conference website provides a range of experiences from different programmes and projects (Nuffic 2005a, 2005b). An interesting contribution to the Nuffic conference is Boeren (2005) who reviewed the different international cooperation programmes in higher education and research.

The issue of linking research to policy is also addressed in several publications. The Danish Research Network for International Health (ENRECA Health) Internet website provides a number of links to overviews, publication and guidelines on research communication and promotion of research in development activities and policies. An interesting source of information is the website of ODI’s Research and Policy in Development (RAPID) programme. An example of the available publications is *Tools for Policy Impact: A Handbook for Researchers* (Start and Hovland 2004) which provides a broad collection of useful project management tools for assessing the context, communicating, and influencing policy.

Several of the agencies in the United Nations system offer interesting project management related documents. An example is the International Fund for Agricultural Development (IFAD)²¹. National development agencies often also provide general development project guidelines, manual and toolboxes offering inspiration for how to conduct project analysis and carry out project planning. Several NGO’s also provide comprehensive toolboxes. An example is the online source of project management tools in the CBNRMtrain resources library. CBNRMtrain is a network of Community Based Natural Resource Management (CBNRM) trainers and facilitators in South-East Asia. The organization links to a range of project management tools on their website²².

A number of online resources are available that provide formats and guidelines for research protocols and research project applications. An example is World Health Organisation’s (WHO): *Guide for writing a Research Protocol for research involving human participation*²³. The *Grant application form*²⁴ provided by International Foundation for Science (IFS) is another format useful for research project formulation. A more comprehensive guide for developing research proposals is provided by the International Union of Forest Research Organisations (IUFRO): *Handbook for Preparing and Writing Research Proposals*²⁵.

Danida’s guide to the Logical Framework Approach (LFA) (MoFA 1996) is a good inspiration for organising the project preparation phase. The focus of LFA is on project preparation and LFA should be complemented with other approaches. Recently, Sida has issued a number of publications reviewing the foundation of the LFA (Örtengren 2004); discussing the use and abuse of the LFA (Bakewell and Garbutt 2005); and suggesting complementing the LFA with an appreciative inquiry approach (Sida Civil Society Center 2006). Several websites provide comprehensive collections of LFA manuals and documents, including the Monitoring and Evaluation NEWS website²⁶ and the PPM&E Resource Portal²⁷.

²¹ See: <http://www.ifad.org/pub/index.htm>

²² See: <http://www.recoftc.org/site/index.php?id=393>

²³ See: http://www.who.int/rpc/research_ethics/guide_rp/en/index.html

²⁴ See: http://www.ifs.se/Forms/list_of_all_forms.asp

²⁵ See: <http://www.iufro.org/science/special/spdc/training-resource-centre/proposal-writing/>

²⁶ See: <http://mande.co.uk/2008/topic-bibliographies/logframe/the-logical-framework-a-list-of-useful-documents/>

²⁷ See: <http://portals.wi.wur.nl/ppme/?page=2130>

Appendix 2: Basic project management tools

SWOT analysis

The SWOT (strengths, weaknesses, opportunities, and threats) analysis can be used in relation to several aspects of project management. Firstly, the analysis is a good starting point for an initial analysis of the institutional basis for a partnership. Secondly, the analysis can produce an overview of the risk and uncertainty factors involved in the project. Thirdly, the analysis can be used as a strategy development tool where combinations of internal and external factors are combined in order to develop alternative strategies and clarify project direction and choices.

Positives	Negatives
<ul style="list-style-type: none"> • Strengths • Assets • Resources • Opportunities • Prospects 	<ul style="list-style-type: none"> • Weaknesses • Limitations • Restrictions • Threats • Challenges

Figure A2-1. The initial step of the SWOT analysis.

The SWOT analysis is often used in a participatory analysis of the project situation. A facilitator should be appointed to organize and lead the process. Materials needed include cards and gum or stickers/labels, and flip-over sheets or a blackboard.

A good starting point for the SWOT analysis is a brainstorm on positive and negative aspects of the situation. Participants are asked to write down their input on stickers/labels and place them under the right heading on a large table (similar to the one shown in Figure A2-1) drawn on a blackboard or made by flip-over sheets on a wall.

Participants can be involved in categorising the input by letting each participant read his/her input aloud when placing it on the blackboard. Similar inputs can be merged if participants agree.

The second step in the analysis is to categorize the initial statements into internal and external factors. Figure A2-2 illustrates a structure useful for this purpose. The structure can be drawn next to the positive-negative table, and each label can then be moved from the first table to the second while the participants discuss where it should be placed and why.

Internal factors		External factors	
Strengths	Weaknesses	Opportunities	Threats
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
...

Figure A2-2. Positive and negative elements categorized as internal or external factors.

Internal factors include the partners' resources and experiences:

- Human resources – e.g. staff, management, administration, steering group members, students, and professional network

- Physical resources – e.g. location, buildings, equipment
- Financial – e.g. core budget, available grants, other sources of income
- Activities and processes – e.g. existing programmes and projects, teaching activities and curriculum revision process, established management and administration systems
- Past experiences – e.g. research, teaching and administrative experience, reputation in the sector and research community

External factors include forces and facts that the partnership participants do not control:

- Future trends in your field – i.e. the development and policy issues on the present and future agenda
- The economy – local, national, or international
- Funding sources – e.g. foundations, donors, legislatures
- The physical environment – e.g. relations to surrounding physical infrastructure
- Legislation – impact from existing or anticipated national legislation
- Events – local, national, or international

Once participants have categorized strengths, weaknesses, opportunities, and threats, these are then prioritized to identify which strengths and opportunities are best made use of, and which are the more serious weaknesses and threats that need to be actively addressed.

When the group has finalized the priority discussion, the content of Figure A2-2 is transferred to a structure like the one shown in Figure A2-3. Based on the prioritized lists of internal and external aspects, participants finally develop suggestions for strategic action. These suggestions aim to identify how internal strengths can be used to take advantage of opportunities or to avoid threats. Likewise, it is considered how internal weaknesses can be avoided by taking advantage of external opportunities. Finally, strategies for minimising weaknesses and avoiding threats are developed.

	Strengths	Weaknesses
	1. 2. 3. ...	1. 2. 3. ...
Opportunities 1. 2. 3. ...	Opportunity-Strengths (OS) strategies Aim: To use strengths to take advantage of opportunities	Opportunity-Weakness (OW) strategies Aim: To overcome weaknesses by taking advantage of opportunities
Threats 1. 2. 3. ...	Threat-Strength (TS) strategies Aim: To use strengths to avoid threats	Threat-Weakness (TW) strategies Aim: To minimize weaknesses and avoid threats

Figure A2-3. Strategy development matrix used in the final step of the SWOT analysis.

The SWOT analysis can be conducted in a relatively short workshop, but carrying out a full-scale SWOT for a RCB project will take time and doing so over a series of workshops where adequate time is available for discussing proposed strategies, as well as the underlying assumptions and consequences, is recommended.

Stakeholder analysis

Project “stakeholders” are defined as individuals or groups “who can influence or who is being affected by the project”. A stakeholder analysis should be carried out by the project manager as one of the initial steps, when developing the project idea. Later in the process the project team should repeat the analysis. The analysis can be initiated with a brainstorm where participants are asked to identify who they consider to be stakeholders. For inspiration at this stage, the following questions can be asked (Kousholt 2007):

- Who initiated the project?
- Who is paying for the project?
- Who has opposed the project?
- Who will use the project’s results?
- Who is involved in the project?
- Who is supplying resources for the project?
- Who will be influenced by the project?
- Who is afraid of the project’s results?
- Who will be blamed if the project fails?
- Who is competing with the project?

Once a list of stakeholders has been produced, the participants can start to categorize each stakeholder. Different categorisation parameters can be used. An approach is to categorize stakeholders according to 1) importance of the stakeholder’s active participation in the project, and 2) the stakeholder’s potential influence on the project. Figure A2-4 shows a grid that can be used for this categorisation. If the initial stakeholder identification was made on labels, or cards, these can now be transferred to a table similar to Figure A2-4 drawn on a blackboard or flip-over sheet. Based on a discussion among the participants, stakeholders are categorized into:

- “Hostages” who have no influence, but are necessary for the project’s performance
- “Resource persons” who are necessary for the project’s performance and have great influence
- “Gray eminences” who have great influence, but are not necessary for the project performance
- “Public” who have no influence and are not necessary for the project

The purpose of this exercise is to clarify participants’ perceptions about stakeholders, and to start identify which stakeholders to focus on in the project management effort.

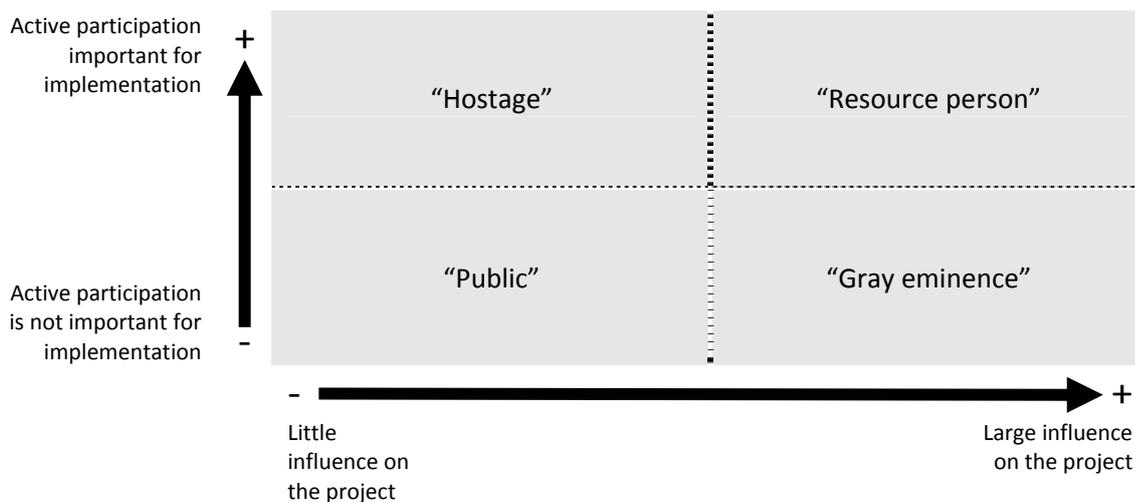


Figure A2-4. The stakeholder importance-influence grid.

The next step in the stakeholder analysis is to develop a more structured description of the most important stakeholders, their role in the project, and describe the stakeholders' success criteria. Once this overview is created, the project participants can start develop initiatives that can help the project meet stakeholders' success criteria. Thus, the stakeholder analysis provides the initial information necessary for an active stakeholder management effort, e.g. initiatives that more closely integrate the project's positive stakeholders, convince sceptical stakeholders, or limit the influence of negative stakeholders. Figure A2-5 illustrates a table useful for this process. If the exercise is made in a participatory way, the table can be drawn on a blackboard and participants can discuss and fill out the columns together. In this way the stakeholder analysis becomes an important element in creating a shared perception on the basis of the project's stakeholder management.

Stakeholders in the project	The stakeholder's role in/contribution to the project	Importance and influence (1-5)	Success criteria of stakeholder	Proposed initiatives
Brief description	Brief description	Scale 5, 4, 3, 2, 1 and clues 5 = Decisive importance/right to veto 3 = Can affect the project considerably 1 = Only formal importance - without impact	Extensive list	To meet critical success criteria
...
...

Figure A2-5. Checklist for stakeholder analysis (Based on Fangel 2008).

Risk analysis

The risk analysis aims at identifying potential risks and problems that can occur during the project implementation. Like the stakeholder analysis, the risk analysis can also be carried out as a participatory exercise starting with a brainstorm where participants write down their concerns on labels, or cards.

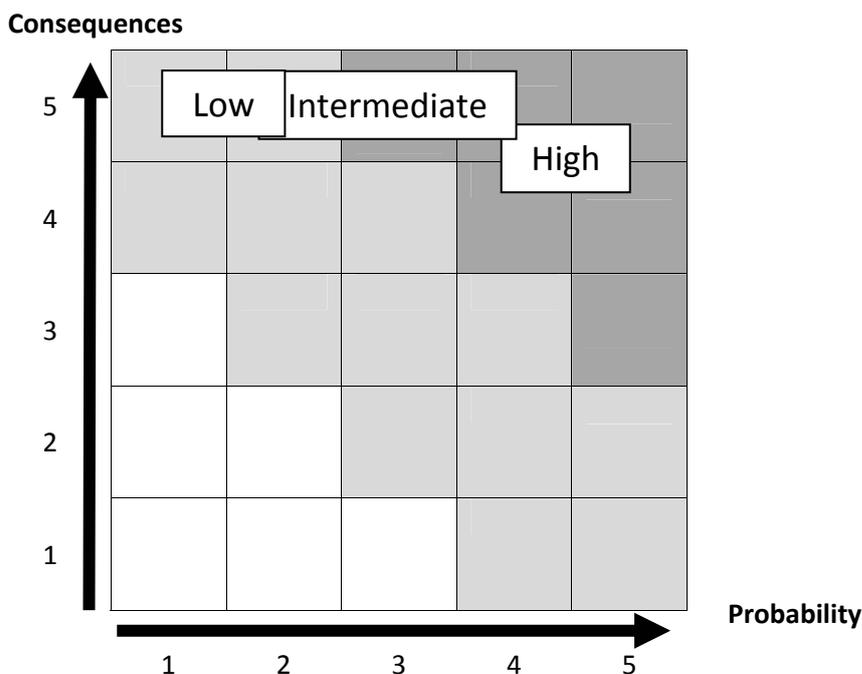


Figure A2-6. The risk consequence-probability grid.

Once a list of risks and problems has been developed, each issue can be categorized according to the probability of occurrence and the expected impact or consequence if it occurs. Figure A2-6 shows the consequence-probability grid used to categorize risks into high, intermediate and low risk elements.

Through a discussion of each risk element participants agree on where to place the topic in the grid. Labels or cards are used to make the decisions visible for the entire team. Part of the purpose of the exercise is to make the participants discuss how they define a high, an intermediate and a low risk.

Based on the result from the consequence-probability grid and the resulting discussion, participants can start to develop a risk management strategy. The table in Figure A2-7 can be used to structure the process. First, the risks are listed and evaluated in terms of consequences and probability (transferred from the consequence-probability grid). In column 4, the importance of each risk is identified by multiplying the values in column 2 and 3. Next, a risk response is identified for the highest prioritized risks (i.e. high value in column 4). Three basic approaches can be taken: 1) ignore and react if the risk materializes; 2) accept the risk, but prepare an alternative plan if it materializes; 3) change the plans to eliminate the risk from the outset. The risk responses are important inputs for the master project planning, both in terms of input for the design of specific project activities and for planning the monitoring effort.

Potential risk (what could go wrong)	Consequences for the project (1-5)	Probability of risk (1-5)	Need for project management effort	Proposed response
Brief description	Scale 5, 4, 3, 2, 1 and catchwords 5 = stops project 3 = decisive 1 = without importance	Scale 5, 4, 3, 2, 1 and catchwords 5 = stops project 3 = decisive 1 = without importance	Consequences X Probability	To limit probability or consequence
...
...

Figure A2-7. Checklist for risk analysis (Based on Fangel 2008).

The Logical Framework Approach

The LFA provides a tool for structuring change processes by making explicit and sharing perceptions, options and choices involved. Danida's manual (MoFA 1996) emphasizes that LFA should be used to foster commitment to transparent, structured, participatory and flexible development processes. LFA manuals are provided by several donors, e.g. Danida (MoFA 1996), Norad (1999), and EuropeAid (2004).

When using the Logical Framework Approach, it is recognized that change processes are characterized by:

- A context in which we act
- A problem area or situation we want to change
- An objective or future vision we want to achieve
- Execution of choices about where to move through time
- Actions we want to implement

The LFA is a tool developed to design change processes, monitor progress and evaluate impact. The elements of the change process are structured and ordered in a logical sequence: *Inputs* will – under given *preconditions* – be sufficient to perform *activities* that will – under given *assumptions* about the context – produce *outputs* that will – under given *assumptions* about context - achieve or contribute to the *objective*. Figure A2-8 shows the LFA matrix which is the primary project management tool of the methodology.

Developmental objective	Verifiable indicators	Assumptions (immediate objectives to developmental objective)
Immediate objective	Verifiable indicators	Assumptions (output to immediate objectives)
Outputs	Verifiable indicators	Assumptions (activities to output)
Activities	Input	Preconditions

Figure A2-8. The LFA matrix.

The LFA matrix shown in Figure A2-8 is a central element in the master project planning when using LFA. The matrix provides an excellent overview of the inherent logic of the project. The matrix may be developed in a participatory process, e.g. a 2-day workshop, involving key project participants. Such a process can be highly rewarding in terms of developing a shared perception of the logic of the project. Especially, it is important not to underestimate the importance of discussing the participants' assumptions in an open-minded way. Engaging an external facilitator to conduct the participatory workshop can be useful, since disclosing participants' worldviews and underlying assumptions is often difficult.