"THE CONSERVATION PROJECT MANUAL"

Development of this guide has been a collaborative project between the BP Conservation Programme, Fauna & Flora International, BirdLife International and the RSPB – the BirdLife Partner in the UK.

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After Robin Mitchell initially conceived the idea for the book, a steering committee was formed comprising Dieter Hoffmann and Martin Davies of the RSPB; Martin Hollands and Tim Flinders from FFI; Robin and, later, myself from the BP Conservation Programme. This group identified the scope and breadth of the book and identified the areas where there was a perceived need to have guidance on conservation project planning.

The authors' work within this manual cannot be allotted to particular chapters, and is spread and merged together throughout the text. A great deal of work was carried out during the editing process to ensure each of their contributions was represented in a clear way that flowed through the description of the planning process. Colin Bibby's immense patience and expertise was invaluable in this process. Thanks must also go to those contributors who have allowed and helped us to diffuse their work in this way.

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Marianne Dunn, BP Conservation Programme Manager

Section 1: Why plan?

1.1 Introduction

This manual has been created in response to a need identified by the partners and staff of BirdLife International and Fauna & Flora International. It was recognised that many people around the world who take responsibility for planning and managing conservation projects have not been fortunate enough to receive specific training in this.

The basic aim of this book is to help people to improve the process by which they go about planning and managing their projects. It is founded on the belief that a good plan makes the implementation and management of a project easier and success more likely.

By using a number of tried and tested methods and illustrative examples, the manual will enable users to work through their own concepts and create a project plan.

Various user groups will find certain parts of the manual useful in different situations, sometimes needing to go into more or less depth, sometimes merely dipping into the appropriate section when following the methodologies. However, the manual is designed so that users who grasp the general principles will have understood all the elements of a successful planning process.

We encourage users to treat the manual as a guide, not a rigid work-book, adapting techniques where they feel they are helpful.

A final and important point is one of sustainability. As conservationists, we are all working towards a goal of achieving a sustainable relationship between man and biodiversity. However, because timing is often tight and money precious, conservation projects are sometimes designed to fit the administrative needs of the funders rather than designed to solve major conservation problems. We need to be aware of the simple temptation to just

'follow the money' and endeavour to ensure that our projects are designed and carried out with the longer-term conservation objectives in our sights. With a flexible approach, good feedback mechanisms and a willingness to change, successive projects should be able to achieve long lasting solutions.

The most striking distinction between different project proposals usually arises from the clarity of their planning.

The elements of a successful plan are the guiding principles of this manual; they are:

- a clear statement of the overall objective
- realistic and achievable lower-level objectives focused on reaching the overall objective
- specific objectives that can be both monitored and evaluated
- understanding the best information on previous relevant actions to date
- networking into the existing local, national and international conservation framework
- flexibility of approach
- a comprehensive grasp of all aspects of the problem and proposed solution
- identification of the external factors critical to success or failure
- a common understanding of the plan and its relevance by all people involved.

1.2 Scope

This manual is aimed specifically at those conservation project leaders and their teams who have responsibility for conducting the planning and implementation of a project. It is written for non-specialists, particularly those who have received no formal training in project planning techniques. The style of the manual is aimed to be most useful to those planning small to medium-sized projects.

The size of a project, though difficult to define, is a function of its complexity, longevity and budget. As a rough guide, we expect anyone proposing to manage more than US$150,000 will already be quite experienced and will be using additional literature. Users are envisaged to be in a wide range of positions, with varied professional backgrounds and from all over the world. They are likely to be university students, employees of non-governmental organisations, government departments, or institutes.

This manual follows the life cycle of small to medium-scale conservation projects from the moment that the ideas are born, through to the final report and the post-project environment. The main focus is how to go about planning the activities and monitoring the outputs of a successful project. It also includes brief guidelines on proposal writing, obtaining funding, financial management, human resource management and reporting.

There are several important skill sets required to effectively plan and manage a project that are beyond the scope of this manual, such as team building, people-management techniques and facilitation. Equally, once the project is underway, life in the field is not always easy and often the most unexpected things can really challenge every member of your team.

This manual is a self-teaching workbook with case studies providing examples. The layout is designed so that beginners can grasp the central concepts and choose to apply some or all of the supporting methods to a variety of conservation projects. The language used is as non-technical as possible whilst still adhering to the conventions of the internationally recognised techniques used. As far as possible, clear language has been used to enable easy translation. A glossary (pages 185 – 193) defines some of the more technical words that we have used throughout the book.

The manual is distinctive because:

- it focuses on small to medium-sized conservation projects
- it is written for the non-specialist
- it responds to a conservation need rather than being directed at fulfilling the requirements of any given funding body.

1.3 The project cycle

A project is a group of interrelated activities and results with a unified purpose, together with the resources and time frame to achieve them.

Every project is different and the tools and methodologies described in this workbook should be applied flexibly. Planning for a small project might be straightforward, with a small team of two to three people defining objectives, timing and budget in one day. The more complicated the project and the less knowledge you have about the situation to be addressed in your project, the more time you will need to gather information for the stakeholder analysis (see section 3.2) and problem analysis (see section 3.3). Surveys and consultations are therefore imperative to ensure that the characteristics of the project environment and problems, needs and expectations of various stakeholders are clearly understood. Only in the very smallest projects or in areas well familiar to the group can a project realistically be developed without such direct scoping.

Although different organisations may use different terms from below, we do recommend that projects should generally be planned according to the sequence described in this workbook:

ideas ➨ concept ➨ stakeholder analysis ➨ problem analysis ➨ objectives analysis ➨ project strategy ➨ logical framework ➨ roles and responsibilities ➨ resource inputs ➨ fundraising ➨ implementation ➨ monitoring and evaluation ➨ reporting.

Projects of a different scale may differ considerably in the complexity of their planning, but all projects inherently follow the same logic. For small projects involving relatively few people and simple objectives and actions, it may be possible to shorten the process, for example by moving from the problem statement straight to the logical framework (see section 3). But, however

complex or simple your project, the logical steps are still the same, it is only the scale that is different.

Each project includes a set of strategic objectives and the actions required to deliver them. The project has usually been formulated as a means of changing from the actual situation now (taking into account all the factors that have brought this about) to a desired situation at some defined time in the future. Once planned, the project is implemented and monitored, the results evaluated and if the desired situation has then been reached, the project is completed. If it has not quite been reached, another turn (or more) around the project cycle stages of planning, implementation, monitoring and evaluation may be required to achieve this.

The Project Cycle

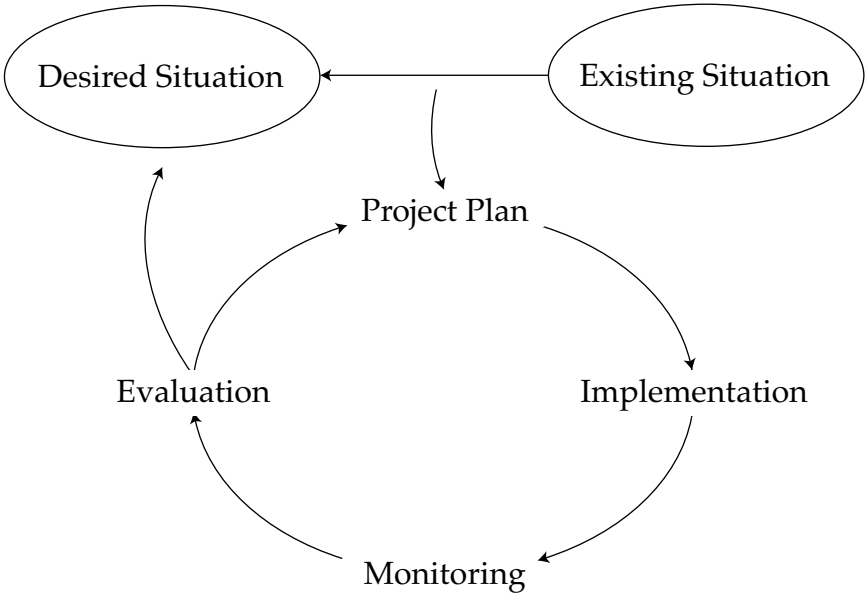
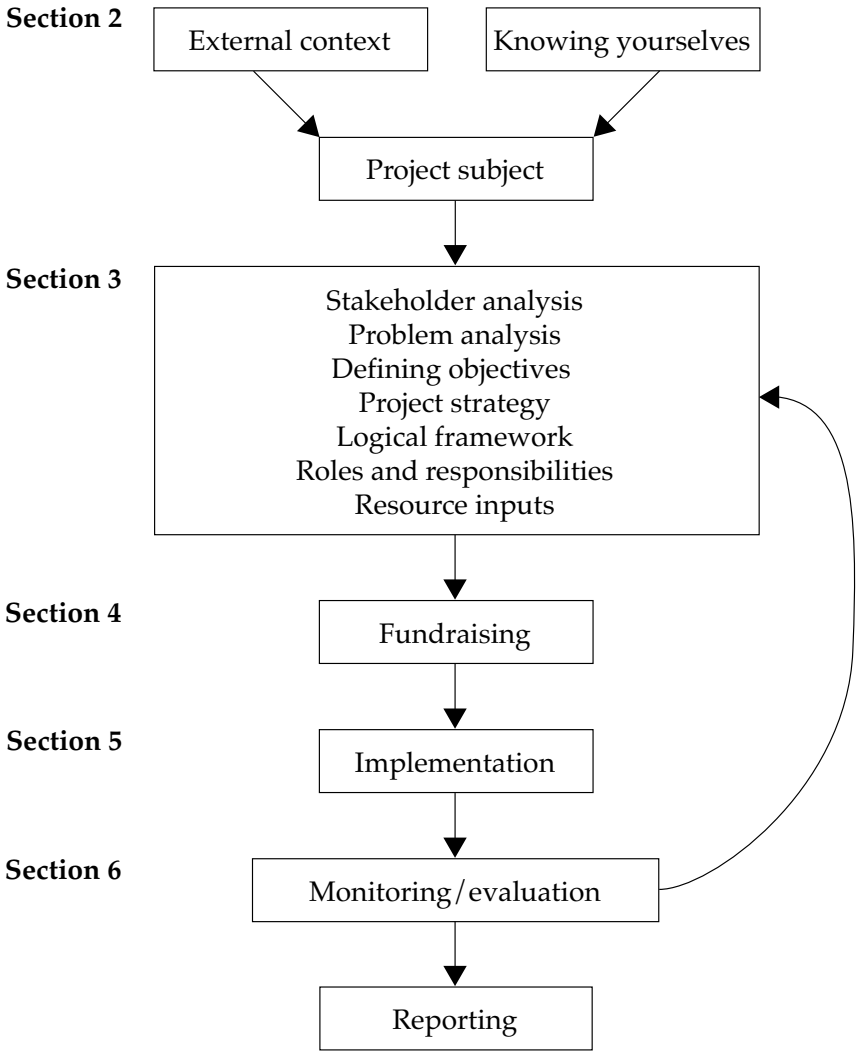


Figure 1: The process this book guides you through



1.4 What is project planning?

Project planning is a process of structured and logical thinking, in which the overall aim is to co-ordinate decisions that will influence, direct and control the future and help to achieve the project objectives. Project planning is a means to an end, not an end in itself.

You will find that rather than simply putting your original plans into practice, often things will change and you will have to continue to adjust your plan throughout the project.

Planning provides a tool for monitoring and evaluating the progress of the project.

There are many benefits to be realised by the project team through good planning:

- you will become clear about what you are trying to achieve
- it will build confidence, provide motivation and widen ownership
- you will identify the strong points of your team, project and working environment
- you will avoid over committing yourselves
- it will save you time and effort in the long run
- the best solutions will be identified when causal factors are made clear
- you are more likely to attract funding.

Planning is about informed decisions about what to do in the future, what resources are required and understanding how you will know that you have achieved your objectives.

Planning is a structured way to answer the fundamental questions of any project.

- Why do we need a project? (stakeholder and problem analysis)
- What are we trying to achieve? (objectives)
- How are we going to achieve our objectives? (project strategy)
- What do we need to achieve our objectives? (inputs)
- How will we know when we have done it? (indicators and monitoring and evaluation)
- Who is doing it? (roles and responsibilities)

A project generally affects a number of groups of people, including project staff from various organisations, funding agencies, decision makers and local people, and all too often the people involved have different perceptions of a project. For example, local people in an economically poor area might expect an improvement in their living conditions, while some conservation organisations may be primarily concerned with the maintenance or enhancement of the biodiversity of the project environment. It is of utmost importance for the success of any project that all main stakeholders have a clear understanding of the expected benefits and their respective roles and responsibilities.

Planning is about reaching a compromise between all those involved and helping to develop a common understanding of the project.

In order to be successful, you must understand not only the expectations of everyone involved but also their capabilities. You need to ask whether all those involved have the knowledge and skills to implement the proposed activities. If not, then you may need more people, some training, or to change your objectives.

Donors and implementing agencies generally have clear guidelines about their objectives, and the kind and size of projects they will support. These guidelines have to be taken into account if a project is planned with specific agencies in mind.

During the lifetime of a project, the project management, donors and all other stakeholders will want to know whether the project is on track, by asking the following types of questions.

- Are the activities being implemented according to plan?
- Are the activities having the desired effect?
- Is the budget being used appropriately?
- Are there unforeseen circumstances that could be preventing the success of the project?

At the end of the project, all stakeholders will want to know the answers to the following questions.

- Have we achieved our objectives?
- Has the project brought about the desired change?
- What lessons have we learned for future projects?
- Has the project set in place opportunities for further complementary work?

A good plan will include measurable indicators that can be used to verify whether the project objectives have been achieved.

By taking into account all points of view, you can begin to develop a common understanding of:

- the present situation
- what you want the project to achieve
- how you want to achieve your objectives
- who will do what and when (the action plan to implement the selected project strategy)
- what financial and human resources are required to implement the action plan
- how to monitor the progress and impact of the project.

1.5 Why plan?

Planning before a project occurs can often seem difficult and daunting. When we start planning a project we can often hear comments like 'but it is impossible to know what will happen in the future, so how can one plan activities which are three years down the road?' or 'clearly, the situation is going to change, and we don't want to be tied to a fixed plan'.

Consider the following scenarios – would you give them the money?

1 An organisation contacts you asking for US$100,000 to conserve a forest.
2 A student wants US$1,000 for doing 'some important work to save a threatened bird.'

Clearly, you would like some more information before you decide to allocate large or small amounts of your scarce resources. You would like to know:

a) how important the forest or threatened bird is
b) what the problem is
c) what they want to do with your money
d) whether the organisation or individual is capable of doing the job
e) whether they will need US$100,000, would US$20,000 be sufficient, or whether they need US$200,000.

You would quite rightly be concerned if you found out that the money was going to be used for conserving a site already designated for logging and where the applicant for funds had no ability to influence this. Equally as worrying would be finding out that local people are opposed to the project because it was proposing to fence off an area to prevent cattle grazing in the forest, but where the project did nothing to

consider the options to find alternative grazing. You would also be dissatisfied by a proposed research survey where the size of the area could not possibly be covered by the small number of people available.

At the end of the project, funders want to be able to say: 'This result has been achieved with our money, and we have really contributed to the conservation of this species or habitat.'

Well planned proposals are more likely to get funded and to succeed.

Section 2: Knowing where you fit in

2.1 Finding your niche within the broader conservation context

There is an awfully large amount of work to do if we are going to maintain the world's biodiversity, and the more we look at any problem the more we realise how much needs to be done. Against this background, and given the natural enthusiasm in most conservation organisations, it can be easy to make ourselves think that we need to go out there and do it all now – on our own.

However, no individual, group or organisation can do it all. It is therefore very important that we not only consider what needs to be done, and how to do it, but also who should be doing what part. Each individual, group or organisation needs to be playing a useful role in a co-ordinated approach to solving the problems, and to be taking on the challenges for which they are best suited.

You are much more likely to be successful if you choose a modest project to begin with, that is within the abilities of your team. If you are successful, you can always expand things later on. Unrealistic ambition is probably one of the commonest causes of failure of projects. If you try to do far more than is realistic for the time and skills you have, you risk ending up with very limited achievement. The trick is to decide what bits you are best suited for – rather than just the bits that look the most interesting.

- Before choosing a particular project or area in which to work, it is useful that you have a clear self-identity. This means properly understanding the culture and ethos of your group, and in particular your strengths and weaknesses.
- When developing any project, bear in mind the staff and skills available.

2.1.1 Building your team

In smaller-scale projects (for example, student projects), teams are brought together at an early stage before much of the planning has taken place. Here, the team that plans the project consists of the people who will also carry out the work, so it makes sense to think about some key criteria early on. In all other cases (for example, projects undertaken by large organisations), projects need to have gone through the planning stages before a team is assembled.

There is a great deal of literature available on team building skills and selection criteria, but there are some broad principles to be taken into account when planning your project. These include the consideration of who is the best person to lead the project, what the optimum size is for your team, team identification and roles, and building project ownership and trust amongst the team.

The project leader

The person who conceived the project idea often takes leadership, as they have a real drive and enthusiasm to see that the project succeeds. There are, however, other factors to take into account when deciding a suitable leader. Successful project leaders require a whole host of abilities. These include technical skills and knowledge, communication skills, good judgement, creativity, flexibility, problem solving skills and a great deal of energy. The leader is expected to have overall responsibility for achieving the project objectives, building the team (and retaining cohesiveness amongst the team), as well as developing the individuals involved in the project. If you are the project leader, don't be too daunted by all of these required traits. Most people possess these qualities to some degree, and they can all be developed and as long as the team leader has a strong underlying commitment and willingness to work at it.

What size should your team be?

This should be thought about in an objective way (rather than just bringing along everyone you like who wants to come). The size of the team will naturally need to be related to the size of the project.

As the size of the project grows so does the team until the optimum team structure emerges. Things you should take into account when considering size of team are as follows:

- **Skills base**. Obviously you need enough people with the skills to satisfy your objectives. Conversely, you do not want too many people with similar skills.
- **Logistics**. If you have a smaller team, arrangements like transport to remote areas and catering, are generally simpler. On the other hand, if logistical tasks are distributed amongst a larger group, the individual burden is reduced.
- **Scale**. If for instance, you want to survey a large area in a limited period of time, you may need more people to undertake this than if you were covering a smaller area (or had more time). Alternatively, you might want to minimise the social and economic effects that your project brings, so a smaller team may be more appropriate.
- **Safety considerations**. Safety often demands working in pairs, and this should be considered for time planning and team size.
- **Costs**. Clearly the number of people in the team will be to some extent dictated by how many your funds can cover. If you have a larger number of people in the team, costs will rise (for provisions etc). But, if fixed costs for the project are high (such as car or house rental), the cost per person will be reduced, which might allow you to consider including more people.
- **Team dynamics**. Larger teams require more organising and structuring than smaller ones. They are often less cohesive, and subgroups can emerge.

How do you identify your team?
You can adopt different methods to find your team members. These include advertising for candidates with posters, undertaking interviews, and getting advice and suggestions from colleagues, friends and seniors. You should also consider involving local counterparts. This is especially valuable where you are going into an area outside your other team members usual realm of experience.

The overriding requirements for project team members, are a strong commitment, a belief in the project's aims, and the right mix of technical skills and knowledge required to get the job done. However, there are other elements that will be important. During the project, you will be relying on these people to work together to achieve your goal, and they must all get along well together. Therefore, attributes such as a sense of humour, enthusiasm, reliability, initiative, flexibility and experience should all be taken into account.

If you are the project leader, you will not only be choosing the team, they will also be choosing you – so make sure you are honest about what the project involves. If the proposed project is physically demanding or requires a lot of extra work before and after the field stage, then say so. Also, be clear about the fact that jobs often take longer than you imagine, especially when logistics, bureaucracy and weather erode planned field time. Those that are keen (and therefore suitable), instead of being bothered by such facts, will be even more willing to be involved.

Team roles

To a certain extent, team roles will evolve as the project plan becomes more detailed, nevertheless it is often helpful to establish some initial work areas (for example a community liaison person, first-aider, photographer, scientific specialist etc). Assign jobs among the team with respect to their abilities and past experience. The allocation of jobs should be completely explicit and transparent so nobody is left under the wrong impression as to where their responsibility lies. This may prove crucial to prevent important jobs from being left to the last minute or completely forgotten about because everyone presumed it wasn't their concern.

You should recognise that you will almost certainly judge people's strengths and weaknesses wrongly in some way after the initial appraisal. It is therefore important to be flexible and maintain frequent re-appraisals of the status of job allocation as the project planning and implementation progresses. Finally, it is worth remembering that the less the project relies on one person for much

of the work, the more stable it will be in the event of something going wrong or somebody being taken ill. It is critical that team members be allowed to voice their opinions and not receive just delegated tasks with respect to a predetermined agenda – the latter is a sure way to build up resentment.

The dynamics of a team are made up of the feelings and attitudes of individual members, and are critical to project success.

In larger projects, managers are usually employed to develop a project. Staff may then be hired or contracted at a later stage after the project is planned (see section 5). In smaller projects, the team may come first when a group of people decides that they would like to do something together.

2.1.2 Analysing your team's abilities and risks – the SWOT analysis

Some groups intuitively develop and learn to work with the strengths and weaknesses of their members; in other cases, a more formal assessment may be worthwhile. An extremely useful exercise, whether done as an individual, as a group, or as an organisation, is what is called a 'SWOT' analysis – looking at your team's Strengths, Weaknesses, the Opportunities open to you, and the Threats to you and your work.

Ideally as a group, with the SWOT table (see figure 2) on a large flip chart or white-board, discuss and fill in your characteristics under the four headings. This might be done either for general attributes or against the particular needs of a task but make clear before you start that everyone in the group understands and agrees as to the precise subject on which the SWOT will focus. Write the subject up at the top of your table so everyone has it clearly in view when considering their suggestions. Use the table as a framework – but

then it is the discussion that counts as much as just the answers.

The best way to get ideas from everyone is to allow people a few minutes to think and write some notes on their own bits of paper. Then begin to ask for thoughts from the group and write them all on the chart. The advantage of doing it this way is that everyone will have something to say. If you start asking for ideas to put on to the chart immediately there is a risk that the most articulate person will out-voice others and some people will hesitate to say anything. People who do not join in to begin with find it harder to do so later and tend to withdraw. Just because some people are quieter or less confident in public does not mean that they do not have valuable ideas.

It is best to get a good range of ideas out without starting to discuss any of them except to clarify that everyone understands what is meant. If you start discussing the first few, it is easy to lose track of the overall picture you are trying to create. Also, the flow of ideas on to the chart might encourage people to see new points. Don't worry if some seem a bit odd. Odd ideas often lead to more interesting thoughts and discussion. It is not necessary to write fully constructed sentences – just enough so that everyone knows what the point is.

It is better to tackle each of the four cells of the SWOT table separately and in order, brainstorming each in turn and only moving on to the next when the suggestions from the group for additions to one category dry up. When considering each cell, it is worth bearing in mind that Strengths and Weaknesses often tend to be inward-looking (examining your own group or organisation), whereas Opportunities and Threats tend to be outward-looking (considering the external situation or influences that could affect you).

Figure 2: An example of a simple SWOT analysis for a small team thinking about a small project involving turtle conservation, biodiversity survey and education

Strengths • We have six keen members who will work on the project for three months • Two of our members are trainee teachers • We are all resourceful people! • Two of us speak the national language • We visited the site last year	**Weaknesses** • We are not politically powerful • We have only one ornithologist and no botanists • We have no members from the immediate area or anyone who can speak the local language • Most of the turtles will not be there at the season we can visit
Opportunities • There is a well established protected area • Good contacts with government environment department • Education is big part of the regional development plan • A friend's brother owns a pet shop	**Threats** • Taking on more than we can deliver • Accident or illness • We have raised only 5% of our budget and we should start in six weeks • A big international NGO is starting a conservation project in the region

In the SWOT example given in figure 2, the fact that there are two teachers suggests that the education component of the project could be well exploited. With only one ornithologist and no botanists, perhaps the idea of a general biological survey is excessively ambitious because there will not be enough time or the right skills to achieve anything very significant.

What about the pet shop owner? Presumably this is not an opportunity for trading but perhaps they could be brought in with an education component? Perhaps the big conservation organisation is not a threat at all. Maybe they would offer support (or even money) if your plans fitted with theirs.

Is it serious that you cannot be there during the nesting season when there will be less local interest in the turtle beaches? This is probably rather crucial and maybe you should try to reschedule things. Lack of local input and the local language might be rather a serious handicap.

Perhaps you need to recruit a couple of local students to help with a cultural understanding? But maybe education is usually conducted in the national language so that is less of a problem.

You will also find that some characteristics cause lengthy discussion because, what some people see as a weakness, others will insist is a strength. For instance, the small size of a group might be a weakness as you have a small work force to cover a lot of tasks but as a strength since it makes you responsive, with quick and easy decision-making and communications. These 'sliders', which can move between strengths and weaknesses, or threats and opportunities, are often the really key ones to think about, so you can make sure they work for you as strengths or opportunities rather than weaknesses and threats. Often, for the strengths or opportunities you identify, you may find for some of them that there are weaknesses or threats that directly mirror them.

The SWOT Analysis helps you identify the issues; you then need to consider the following questions.

- How are you going to play to your strengths?
- How are you going to develop your current weaknesses until they are strengths?
- How will you do things differently so the weaknesses don't matter?
- How are you going to take advantage of the opportunities open to you?
- How are you going to avoid the threats?

When reviewing the issues raised in the SWOT discussion, it is best to agree and summarise the main items to go into the finalised SWOT analysis. There is no great help in having a long list especially of parameters that are well beyond the scope or influence of the potential project. The summary might perhaps show three to five top priority issues in each box. Then think of perhaps three things to do in response to the main entries in each box. It might be useful to draw these together as a one-paragraph profile of the team, its skills and strengths and the type of work it could best do. This will help to convince funders and collaborators that you have thought about such issues. It should also help you to keep your focus when it comes to more detailed project planning.

2.2 Working together with others

Once you 'know yourselves', you need to see how this can best fit in with what needs to be done. In some cases, it can also be useful to think about the strengths and weaknesses of other groups with which you might work. This will give you a better understanding of the relative advantages you each have in different situations. This, of course, is so that you can collaborate more effectively with them rather than compete more effectively against them. Again, funders are happier to support people who have worked out how they complement existing efforts rather than those who appear unaware of other groups.

So that limited conservation resources can be used to best effect, it is good when different groups or organisations come together to jointly gather and evaluate information, discuss problems, trends and threats.

There are a number of ways in which national or regional planning takes place, such as the development of National Biodiversity Strategies and Action Plans (NBSAPs). Most of these will now take place as participative, open processes. Even when such plans are

complete, there are often processes to oversee their progress. You should try to take part as this will allow all of the organisations to go jointly from what needs to be done, to how it needs to be done, and to the skills, expertise and strengths needed to do it. This can then be checked against the strengths of the organisations and groups that want to be involved and components allocated appropriately.

If you weren't involved in the planning process you can still pick up the information from it, from the published reports, or speak directly with the co-ordinator or others who are involved.

Try to find out:

- what the identified priorities are
- what actions need to be done to achieve these
- what is already being done by whom
- what the priority gaps that still need to be filled are
- what the key skills/strengths needed for these are
- how these fit with your skills.

As already said, conservation gains are more likely to be achieved by groups working together, but there are often several mechanisms available for achieving this. Each of these will have different advantages and disadvantages depending on the context and the point of view. Some possible ones are included overleaf.

Figure 3: Types of relationship to be built with other organisations

Structure	Brief description	Advantages	Disadvantages
Network	An informal arrangement primarily to increase communications and exchange information – including good practice.	Allows an increase in efficiency as people have a better idea of what others have done and are doing. You keep individual flexibility.	It takes time. There are gaps. Activities are still not coordinated. Competition still operates.
Coordination	A more formalised system whereby there is an agreed decision-making process.	More efficient activities.	Takes more time. Roles not always as clear as when managed.
Alliance	Normally relatively informal agreement betweeen two or more organisations to work together towards agreed objectives.	The strengths of the organisations are pooled but each maintains its independence. More informal structure. Roles may not always be clear and assumptions can be made.	Takes development and management time outside of programme delivery. Less controlled action than more informal structure. Roles may not always be clear and assumptions can be made.
Partnership	Legally constituted arrangement involving contracts between two or more parties.	Roles and responsibilities are clearly laid out. Agreed and understood management structure. Should be effective way to broaden skills available.	Greater investment to set up and run. Can reduce flexibility of each member.

It can be very easy in the enthusiasm of collaborative discussions to want to work with others and to commit to working together to achieve the greater good. Although there are very many positive aspects to each approach to working together, it is essential that the consequences are carefully thought through. In this way advantages can be realised and potential pitfalls recognised and avoided.

Everyone wants to show their organisation in the best light and can be tempted to talk up its capabilities. This, however, can be a major problem if it is talked up to potential collaborators who will then have false expectations of what their new partners can contribute. This is because no-one will then want to lose face by admitting to their new partners they can't really live up to their claims. Such situations can easily lead to disappointment and disillusionment down the line. Make sure that you don't give out such false expectations – and be cautious about unsubstantiated claims of others – especially if you haven't worked with them before.

It can also be very easy for everyone that sits in on a discussion to come away with a slightly different understanding of what has been agreed. We all see things through the lens of our own preconceptions, hopes and prejudices. It is therefore essential that the details of agreements with other organisations are clearly laid out in a written agreement, either a formal contract or at least a Memorandum of Understanding. This will need to state clearly the aims and objectives of the arrangement, the roles and responsibilities of all parties, the planned activities, management and review arrangements, and a clear explanation of funding. Areas that are often left out, and therefore cause problems afterwards, are arrangements over communications, publicity, and any materials generated.

Real working relationships between organisations – rather like individuals – take time to develop. Rather than jumping straight into a mega-partnership, you should start off on smaller joint initiatives and work up towards the bigger ones once you understand each other and how to work effectively together.

In many areas of operation, including partnerships, there are many things that can go wrong. It is therefore important in your planning to build in contingency plans so that breakdown in delivery in one small area, whether by you or a partner – doesn't inevitably lead to failure of the whole venture.

Collaboration is very important in conservation but needs working at – and will only come about if people work in an open and transparent way.

2.3 Looking at the bigger project environment

Common sense indicates that projects will always be more effective if they can fit within a broader framework, rather than operating in a vacuum. By taking a big-picture approach you can ensure that even a small project contributes to bigger conservation goals, and you can improve opportunities for communication, recognition, and likelihood of follow up and sustainability of your project. When designing a project it can be a daunting task to identify projects that meet identified conservation priorities in the context of local needs. Often it will take time to work out what the most important areas are, and local expectation of your capability might be very high.

- In one instance, a group of local people proposed that a small project team should be the ones to set up nature reserves, find employment for them all as wildlife guardians, as well as study all of the biological characteristics of the marsh deer in the Delta del Paraná in Argentina. This expectation then had to be very carefully managed, to avoid disappointed expectations.

In some places, a research station for example might have objectives of its own that you can fit into. There are also often opportunities for you to take into account existing plans at regional, national and local levels, and to ensure that the planning process allows your new project to contribute towards meeting the identified needs of other initiatives.

2.3.1 The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) was first opened for signing at the Earth Summit in Rio in 1992. Since that time over 180 parties have ratified this convention. The CBD sets out a framework, which can be applied at both international and national levels, and includes a series of articles focusing on means to achieve the three overall aims of the convention – conservation of biodiversity, sustainable use of resources and equitable sharing of benefits from biological resources. Countries that have become parties to the convention are obliged to provide regular reports on the status of their biodiversity and the actions they are undertaking to ensure further protection of their natural resources, in relation to the articles of the convention. However, the first obligation of parties to the convention (under Article 6) is the production of a Country Study on Biodiversity and a National Biodiversity Strategy and Action Plan (NBSAP). The NBSAP process produces two complementary documents. The Country Study (or Biodiversity Assessment) sets out a detailed analysis of the current status of biodiversity and factors affecting it, and the NBSAP sets out a plan of action for the further protection of biodiversity in that country.

The text of the Convention on Biological Diversity can be downloaded from http://www.biodiv.org

2.3.2 National Biodiversity Strategies and Action Plans

National Biodiversity Strategies and Action Plans (NBSAPs) are developed to provide an integrated framework for actions to improve the status of biodiversity, over a wide range of political and societal sectors. NBSAPs are developed through an adaptation of a standard biodiversity planning approach, aiming to involve broad, cross-sectoral participation, and to harness wide-ranging opinions regarding the value, use and future priorities for biodiversity. The final product from NBSAP development is a policy on biodiversity, which should be adopted by the appropriate Ministry with full government endorsement. It sets out the principles and strategies for the protection of biodiversity, but also puts forward specific and costed actions proposed over a set timescale.

NBSAPs are developed through a process of consultation, analysis and prioritisation, which typically involves the following stages:

- appointment of project team and steering committee
- awareness raising (for public and decision-makers)
- consultation (with broad ranging stakeholders and sectors)
- information review (relating to biodiversity, conservation and the national context)
- development of a country study (documenting the current status of biodiversity conservation)
- setting of aims, principles and objectives for the strategy
- development of options to achieve the objectives
- identification of constraints and opportunities for actions
- review of existing activities and identification of gaps and overlaps
- prioritisation and identification of necessary activities
- development of an action plan with associated budgets and timescales
- cross-sectoral review of draft and rationalisation if necessary
- where appropriate, development of funding proposals (for government or donors)
- publication and dissemination of NBSAP

- endorsement and adoption by government
- setting up of implementation team, and ongoing support mechanisms
- monitoring, evaluation and regular review of NBSAP.

By showing that your project contributes to a NBSAP, you can demonstrate how your project can clearly assist the government of that country to meet its obligations to the CBD.

Not all the activities listed in a NBSAP may be of a huge scale, and a number may be considered discrete actions that could be suitable for a small – or medium-sized project. When you consider developing a new project, it is worth checking whether a NBSAP has been completed for the country concerned.

A list of completed NBSAPs is available at: http://www.undp.org/bpsp

In reviewing the relationship between your project and the NBSAP, you should consider not only overlap with the proposed actions in the NBSAP, but also how your project might link into the broader objectives of the strategy.

2.3.3 Local Biodiversity Action Plans and Agenda 21 initiatives

On a local level, the national BSAP planning process has filtered down to the creation of regional or local Biodiversity Action Plans. Within the framework of the NBSAP, these provide interpretation in a more local context, and allow local priorities to be set with regard to site and species protection, as well as institutional development and awareness raising. Such plans can generate a high level of local ownership, and can be genuinely catalytic in terms of community

action. Where such plans exist, they may be an important tool in assisting project selection and the development of parallel activities that draw on a high level of community enthusiasm.

Similarly, the community-focused initiatives for the environment that have been generated through the local Agenda 21 process have had similar results in terms of public participation in project activities. Agenda 21 sets out agreed steps towards sustainable development, and is expressed at international, national and local levels. At a local level, appropriate administrative divisions have taken the lead in generating new mechanisms. These help communities to identify their own environmental priorities, and take active steps to improve their environments. As such, this is a further framework into which smaller, site-focused projects might be linked.

It is often more difficult to locate local planning documents. An Internet search can sometimes help you to locate relevant documents, otherwise it may be worth taking the time to contact local government planning departments or NGOs to see what environmental plans have been produced. Locally produced goals for biodiversity or public involvement in the environment can often help you to develop a project which is well tuned to priorities and conditions at the local level.

2.3.4 Linkages with other international conventions

The CBD is not the only international convention relevant to biodiversity projects. When planning your project it is worth considering how your anticipated activities might contribute towards, or link with the priorities and aims of the following international and regional agreements:

- UN Framework Convention on Climate Change (UNFCC)
- UN Convention to Combat Desertification (UNCCD)
- Ramsar Convention (on Wetlands of International Importance especially as Waterfowl Habitat)

- World Heritage Convention (concerning the Protection of the World Cultural and Natural Heritage)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Bonn Convention (on the Conservation of Migratory Species of Wild Animals)
- Bern Convention (on the Conservation of European Wildlife and Natural Habitats)
- Aarhus Framework Convention (on Access to Information, Public Participation in Decision Making and Justice in Environmental Matters)
- EU 'Birds' Directive (European Union Council Directive on the conservation of wild birds – 79/409/EEC)
- EU 'Habitats' Directive (European Union Council Directive on the conservation of natural habitats and of wild fauna and flora – 92/43/EEC).

When first developing a project it may be useful for you to review the important agreements or conventions that cover the species or areas in which you are hoping to work. This can not only help you to narrow the focus for your project to meet internationally identified priorities, but can also offer pointers about which other organisations or government departments it might be useful for you to contact or liaise with. You can often find information about the status of ratification and national focal points of these conventions through searching the Internet. A number of documents are produced by Convention secretariats, which list their focal species and areas, and you can now generally access these over the Internet (pages 173 – 176).

2.4 Making the most of other groups and organisations

Different organisations set differing priorities, which reflect their primary goals. There are clear opportunities for you to create links from your project to priorities identified by such organisations, and develop projects that complement or contribute to work in these priority areas.

Protected areas may be an obvious choice of place to work. In most countries, these are the responsibility of a government department. There may well be a regional structure and there are usually staff on the ground who may well appreciate help in survey and other management tasks. Many protected areas are supported by projects of national or international conservation organisations.

Universities may be another valuable source of contacts. Many have established research and teaching interests in areas of conservation importance.

It can be useful to have an awareness of the key priorities of other organisations at a local, national and international scale. You can often access information about the organisations and their priority areas of activity via the Internet, and through promotional material and publications. However, if you want more specific information it may be better to contact the organisations concerned directly.
By taking a more personal approach to key local or national organisations you can often ensure a better understanding not only of what activities they feel need priority attention, but also where your project ideas might link to their existing work. However, as always be aware of the workloads that exist within most organisations involved in conservation, and ensure that your request for information is clear and specific and can be dealt with as quickly and easily as possible.

Do your homework first. People find it much more attractive to accept offers of help if they appear to come from someone who demonstrates that they have already done some work to show how they could make a genuine contribution.

2.4.1 Other sources of information

Several organisations have documented conservation information based on habitats, sites or species. The range of priorities set out by different organisations can be somewhat confusing, and may not always be mutually complementary. However, when developing a project which may relate to one of these categories it can be important to bear these priorities in mind, and build links with them where possible.

WWF (http://www.panda.org/) has divided the whole land surface into several hundred eco-regions and made assessments of which species of vertebrate occur in each as well as the degree to which habitats have been modified or lost. Conservation International (http://www.conservation.org) has selected a small number of rather larger regions that are both unusually rich in endemic species and threatened by habitat loss. These it calls Hotspots. The data on these two global assessments are continuously being improved.

For birds, BirdLife International is in the process of identifying the most important sites for bird conservation globally. These are known as Important Bird Areas. In most countries, there are local groups of ornithologists and conservationists at work on this programme. Again, check BirdLife's website (http://www.birdlife.net) for the most up to date information on what has been published and what is progressing. WWF and IUCN have also identified important areas for plants in a project called Centres of Plant Diversity.

At the species level, IUCN publishes the official global Red List. This documents those species most at risk of extinction, in line with globally agreed criteria. The Red List is available on the web (http://www.redlist.org) and is supported by an extensive paper literature whose references can be found on the website. IUCN specialist groups include representatives from different countries with specialisation in different taxa or themes. By looking at this material you can identify species in particular need of further attention and find the names of people and organisations interested in them.

Effective integrated planning relies on access to, management and dissemination of information. During the development of your project, it is generally important for you to conduct a thorough review of existing programmes and plans for your region of activity. Time spent consulting with a wide range of relevant organisations and individuals early in project development is generally an important investment. By placing your project into the network of ongoing activities, and identifying links and opportunities to add value to complementary activities, you are more likely to contribute to successful conservation on a bigger scale.

Section 3: Planning a project

3.1 Introduction

In the following pages we describe the various steps of planning a project and explain some of the widely used tools that will help you. While the time spent on each step will differ significantly depending on the actual size of the project, the steps are universal and applicable to every situation.

Small projects can easily be developed by a very small group (or even an individual). However, bigger projects (and those which affect many people) need extensive preparation through field visits, surveys and the involvement of key stakeholders. Planning can often be done in a project-planning workshop (see Annex 1, page 178). We have described the more elaborate process steps and hope that people will learn from the logic even if in practice the job can be done more simply.

Planning is not static and planners should take great care to continuously question their earlier plans in the light of new information or the consequences of conclusions drawn in previous steps. If, for example, the planning group has decided on a project with objectives and activities and then discovers that the required budget is unrealistically high (but it is impossible to reduce the costs within the given activities), it is important to go back and reconsider the original plan. Is it possible to reduce the activities, but still achieve the desired objectives? If not, there is no choice but to adjust the project strategy by reducing the scope of the objectives.

3.1.1 'Bottom up' versus 'top down': the two extremes of planning

Generally, we can distinguish two extreme approaches of planning. In conservation, planning is often top-down, though, as we shall see, this may not necessarily always be the most appropriate approach.

'Top down'

- Plans are formulated by management and then passed down for implementation.
- Often used for very large-scale development plans or to define the strategic orientation of organisations.
- Based on a number of specialists who agree priorities (such as globally threatened species) and set high level objectives and targets.

'Bottom up' (often termed participatory planning)

- Plans are produced involving active participation of stakeholders.
- Generally, used for community projects where the participation of local people is crucial for the success of the project.

In practice, every project involves both top down and bottom up approaches. The decision whether to plan mainly bottom up or top down depends on the circumstances of the project in question and the time and resources available. Some important advantages and disadvantages of bottom up planning are presented below.

The best plans are usually a combination of the two, with overall strategic vision combined with fully participatory approaches to on-the-ground delivery. However it is done, it is nonetheless vital to ensure that all involved feel they can jointly own where the project is aiming to go.

Figure 4: Advantages and disadvantages of 'bottom up' compared with 'top down' planning processes

Advantages of bottom-up planning • better understanding of the real-life situation • plan is locally owned • better chance to address local problems • main actors understand their roles • main actors understand project objectives • compromise between various actors	**Disadvantages of bottom-up planning** • time consuming • expensive • potential for raising unrealistic expectations • the approach is highly dependent on individuals consulted • risk of bias towards vocal individuals or decision-makers
Advantages of top-down planning • generally quicker • cheaper • might be sufficient for high-level objectives	**Disadvantages of top-down planning** • the quality of the plan depends largely on the experience of few individuals • actors might not understand their roles and responsibilities • main actors might not share or understand the objective of the project • the interests, problems and potential of stakeholders might be overlooked

3.2 Stakeholder participation

In many cases, the key to a successful project is participation from the start.

In any reference to stakeholders, you will undoubtedly come across the term 'participation'. Participation has a different meaning for different people. For some people, participation means simply keeping everyone involved informed, but not including them in the project planning, although this is perhaps more accurately described as communication. Others insist that true participation requires everyone to be fully involved in every stage of project planning, implementation, monitoring and evaluation.

Stakeholders are people or organisations that are directly or indirectly affected by the proposed project. Generally they include the project partner(s), target groups (i.e. people who are expected to benefit directly from the project or people whose attitude is to be changed by project activities such as public awareness), project supporters, project opponents, etc.

3.2.1 Why do stakeholders matter?

For any project to have a realistic chance to succeed, it is imperative that important stakeholders are involved in the planning process. Even at a very basic level (for example a student's small research project), stakeholders' objectives, interests and expectations need to be taken into account. This may be no more complicated than ensuring that the local community understands and accepts the fieldwork.

Marginalised people (those who live and work on, or even outside the margins of the mainstream economy of an area) often have a disproportionately profound impact on the environment, since they are often far more directly dependant on utilising natural resources.

Planners should therefore ensure that their interests and needs are taken into account. Indigenous knowledge is often invaluable and local people may have an in-depth knowledge of their natural environment. For example, farmers often experiment to find the best farming system and often know what works and what doesn't work in their environment.

Values and beliefs of local people should be taken into account.

- A !Kõ Bushman was able to identify by name 206 out of 211 plant varieties. He was also able to draw finer distinctions between different types of plant than the professional taxonomist for whom he was working. In another study, members of the Hanunoo tribe in the Philippines could identify 1,600 species, 400 more than had previously been recorded in a systematic botanical survey.

Cited from: H. Meltrick (1993): Development Oriented Research in Agriculture: An ICRA Textbook. CIP-date Konink Lijke Bibliotheek, Den Haag

In a larger-scale project, the introduction of sustainable management practices for an important biodiversity area involves not only conservation management specialists, but also ecologists for inventory work, specialists for public awareness, the publications department for the production of leaflets and brochures and others. These people should be recognised in some way through the planning process. Projects often affect various government departments or groups of local people, which in turn can have a significant influence locally, regionally and nationally. For a project to succeed, it is imperative to be are aware of the views of the range of important stakeholders.

Different stakeholders will have differing viewpoints and priorities. While conservationists will be interested in maintaining and

improving wildlife habitats such as forests, a farmer living near a forest reserve will be concerned about the fact that elephants regularly raid his crops and thereby destroy his livelihood. Women in the same community will be interested to ensure easy access to firewood. Local craftsmen would regret the fact that their preferred species of timber is disappearing, while a palm oil producer would want to replace 'unproductive forest' with palm trees. A key question any planner therefore has to answer is 'whose problem is the project going to solve?'.

A major aim of participatory planning, be it as part of a small team or with a large group that might involve many villagers, is to develop a common understanding, both of the situation to be changed and the objectives of the project. Participatory planning therefore addresses the concerns of both top down and bottom up approaches and should lead to true compromise between stakeholders.

Projects should aim to strike a balance between the different viewpoints of stakeholders, but it is worth recognising that sometimes this will not be possible or appropriate. However, even where not everyone's views can be accommodated, simply being aware that they exist can help improve the project plan.

3.2.2 How to identify the various stakeholders

The objectives of stakeholder identification are twofold: to get a clear understanding as to who the main stakeholders are and to understand their values, beliefs, problems and attitudes towards the project. Stakeholder identification will also give you a good understanding as to who should be directly involved in project planning.

Internal stakeholders (i.e. those included within the likely partnership for your project) are relatively easy to identify. You

should by now have a good idea about the objectives, strengths and weaknesses of your team and project partners (see section 2), and the initial project idea should give you a sufficient insight of which specialist knowledge will be required to implement the project. External stakeholders (i.e. those likely to remain outside the project partnership but who may be affected by the project or have some other interest in its outcome) are much more difficult to identify. The first task (often overlooked) is to differentiate sufficiently between your stakeholders. It is not good enough for example merely to limit the definition of villagers around a national park to 'local people'. There are likely to be huge differences within this group and the aim should be, as much as practical, to define homogeneous groups with similar characteristics.

In its simplest form, people who know the project situation very well can simply brainstorm the list of important stakeholders and analyse their characteristics in the form of a stakeholder analysis (see below). However, more often than not, planners need to analyse the situation in the field. For simple projects, it might be sufficient to consult key informants. These are individuals who know the local situation well, such as village heads, local government officials, local teachers and religious leaders. Larger projects will often require more detailed specialist studies to fully understand the socio-economic environment of the project.

Clearly, the most direct method of involving stakeholders is to involve everybody directly in the project planning. While this is feasible for some small projects, it is clearly impossible to do if large numbers of people are involved. You should therefore consult directly with every stakeholder group through formal and/or informal surveys, group discussions or similar tools of participatory approaches. True participatory planning requires special skills in team dynamics, visualisation, interview and facilitation techniques (and therefore requires specialist input).

3.2.3 Stakeholder analysis

The challenge is to take the viewpoints and actions of these specific groups into account. The objectives and interests of the people, social groups or institutions participating in or affected by the project should always be included in planning, through a stakeholder analysis. This step is generally done during the planning workshop, after a thorough analysis of the situation in the field.

The objectives of the stakeholder analysis are:

- to list and characterise the major stakeholders
- to understand their present and potential roles and responsibilities
- to understand their interests, fears, problems and potentials
- to draw conclusions for the planning of the project.

List of main stakeholders

This step is a simple collection of names of relevant groups. There are often a large number of stakeholders involved. It is therefore highly recommended to cluster stakeholders into homogeneous groups with similar characteristics, problems and interests. On the other hand, great care should be taken not to lump different groups together. Even conservation groups for example may not be sufficient – each group may well have its own particular perspective on an issue. Always refer back to the project idea to check whether a group is really a major stakeholder or not. This will often become an iterative process – once you have put together your initial project plan and have developed a clearer focus of what it will do, you will probably have to reconsider your stakeholder analysis to identify any additional stakeholders in relation to this.

Analysis of stakeholders

The second step is an analysis of each stakeholder group in terms of its characteristics, impact and relation to the project. There are many different ways to do a stakeholder analysis. We recommend the planning group agrees the headings under which each group is analysed. Conventionally, these include: main characteristics such

as social structure, interests (what makes them tick), impact on the present situation, fears and expectations.

Recommendations and prioritisation
Following the above analysis, the planning group should agree a recommendation as to what the project should do to address the findings of the analysis and which priority should be given to its implementation.

Results of the stakeholder analysis should be presented in a short summary of the findings. A simple table might be sufficient for inclusion in the planning document, sometimes donors ask for a more detailed description of stakeholders. An extract of a stakeholder analysis is presented on pages 42 and 43 (as Figure 5).

Figure 5: Selected part of a stakeholder analysis for a project aiming to develop an action plan for a declining vulture population; some stakeholders might have negative views of the project and their positions need to be understood to work in the right direction; different stakeholders have different degrees of potential contribution and impact and might be involved in the project in different ways; representatives of all the major groups would be needed to formulate a plan that had a good chance of success.

Stakeholder	Characteristics	Main interests	Impact on situation
Policy makers	Elected highly influential Temporary position	Satisfy needs of people, re-election	Support of farming communities, little awareness of conservation
Government conservation departments	Limited influence, experience on site conservation, well staffed, under-funded	Conservation of biodiversity	Limited awareness
National conservation NGOs	Highly motivated, lack of capacity and resources	Nature conservation	Monitoring of the problem, public awareness
Research scientists	University based, well trained, highly motivated	Improving knowledge, obtaining research funds	Research causes of population decline
Large cattle ranchers	Organised in an association, influential	Increase grazing area, maximise production and income	Accidental and deliberate poisoning

	Interest/fears/ expectations	Relation to project	Potential impact	Recommendations	Priority
	Like positive publicity, fear that project might hinder development	Potential supporters	High	Keep them informed	***
	Would like to take a lead, staff input	Project partner	Critical		***
	Input of expertise	Collaborators	High		***
	Would like to be involved	Collaborators	Medium	Sub-contract	**
	Fears that the project might stop poisoning of predators	Potential opponents	Critical	Develop alternative predator control approaches, raise awareness, consider law enforcement	***

3.3 Problem analysis

This is the probably the most important step in the project planning stage. The objective of the problem analysis is to give an accurate picture of the situation the project intends to address. In many instances (particularly for small research projects) the problem might be sufficiently clear to be presented in a single written problem statement. As a minimum, a problem statement should include:

- the description of the situation to be changed (the problem), both qualitatively and quantitatively
- qualitative and quantitative analysis as to which and how many stakeholders are most affected
- explanation of the cause(s) of the problem
- description of the consequences (effects) of the problem.

It may seem obvious, but unless you have accurately identified the problems you wish to address and what factors are causing them, then it is impossible to devise the solutions. Below is a fictitious example of a problem statement to illustrate the kinds of points which should be included.

Clearance of woodlands for firewood and cash-crop farming has left the valley with only 10% of its original forest cover. Fourteen restricted range birds occur in these forests of which three are globally threatened. Continuing clearance is increasing the isolation of surviving forest fragments, which may render populations of the least dispersive species non-viable.

Some 40 families live on smallholdings in the valley and make their income from cash-crops. A thriving eco-tourism business on the lower slopes rarely brings visitors to the forest because the area is difficult to access from the nearest tourist accommodation 50 kilometres away. Local people may have a very low per capita income and continued forest clearance provides the only option they

currently have available to supplement this. The total loss of these forests would be a major loss to biodiversity, not only in terms of birds, but probably other taxa too.

Ensure that you identify real, existing problems. Try to get back to the major basic causes, each of which is a problem itself.

Problems can be identified by brainstorming all the major issues. These can be put into named groups and then the key problem that unifies the groups can be identified. This can be useful to simultaneously identify many problems, but it should be remembered that it also identifies the problems without considering how they may be causally linked. An alternative technique is to build up the causal links from a common starting point. This is called a problem tree or problem network.

3.3.1 The problem tree

In cases where problems are not sufficiently simple or obvious to allow the preparation of a clear problem statement, we recommend the well-tested approach known as problem tree analysis. Although this technique is particularly relevant for complex projects, we recommend that even for small projects planners should consider producing a simple problem tree. The objectives of the problem structure analysis are:

- to give an overview of the present situation that shows links between different aspects
- to identify the major problems in this situation from the point of view of the stakeholders
- to visualise in a network the relations between the problems as cause-effect relationships
- to develop a systematic base for the objectives network.

Remember that levels in the hierarchy of the tree are relative: each problem is both the cause of one problem and an effect of another.

You can identify problems by writing each major issue on separate pieces of paper or card. Please remember the roles of visualisation (see Annex 2): only one idea per card should be allowed. These can all be put up on a wall so that the whole group can discuss and consider them.

To construct a problem tree, get each person in the group to write on a card what they think the problem is that is at the centre of the project. Do a reality check: do you have the resources/expertise to solve it? You then put all these on the wall and discuss whether the group considers that any of the problems are causal of one another and if so to arrange them in a cause-effect relationship (see 3.3.1). You can thus agree a starting problem that is somewhere at the heart of your future project. However, do not get hung up on arguments over what is the main problem. All problems are equally important, the position in the hierarchy does not say anything about the importance.

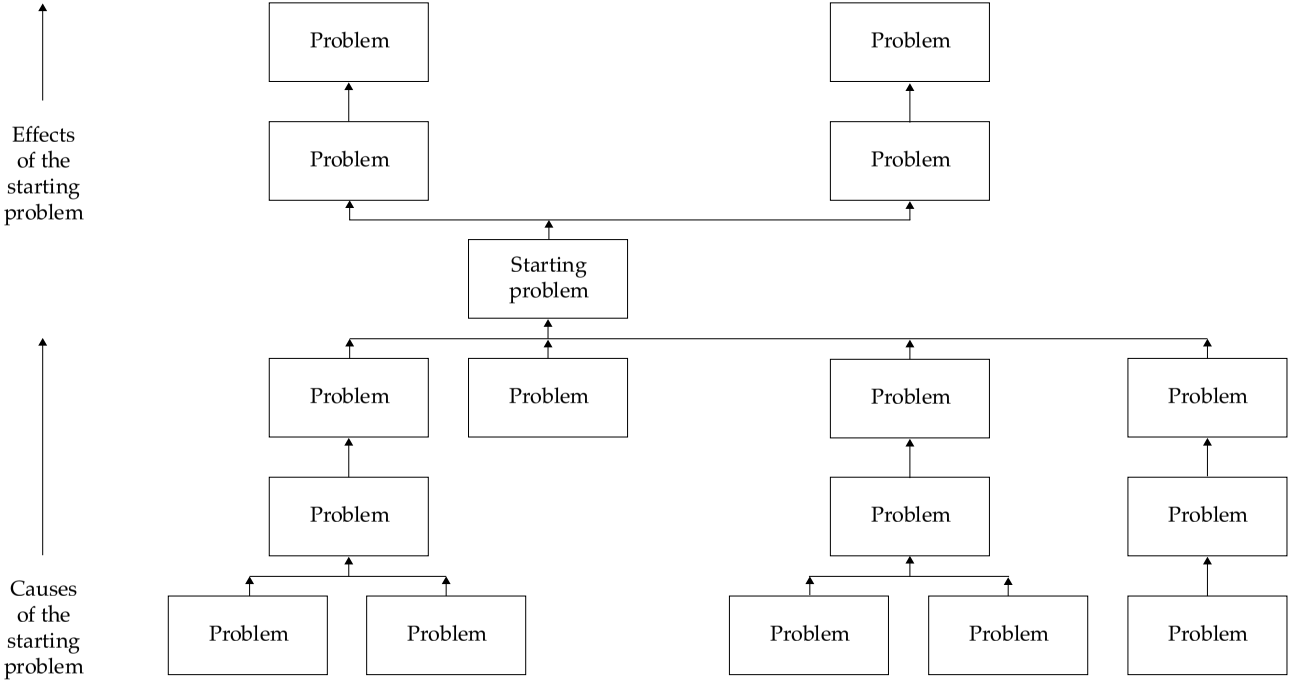
Once you have identified the starting problem, take all the other cards off the wall and ask the group to consider what they see to be the main **direct** causes of this problem.

Clearly identify the problems and the casual relationships between them: this is the single most important stage of project planning.

It is crucial that you force yourselves to be strict in asking what factors are directly causing the starting problem. Then you should see how these are related to one another and, in turn, what the causes of each of these are.

Your problem tree will emerge by arranging cards hierarchically (like the roots of a tree). Those that are causes of your starting problem are arranged below it. Those that effects of it are arranged above it (as seen in Figure 6).

Figure 6: Problem tree: each problem is both cause and effect in relation to the problems above and below it respectively



Procedure

If you remember the following points, problem analysis should be easier.

- Always start by agreeing a starting problem.
- Proceed with identifying the **direct** causes of the starting problem.
- Continue with identifying the **direct** causes of each of the above causes.
- Proceed with identifying the **direct** effects of the starting problem.
- Each higher-level problem may have several causes and then each of these may have several causes (and so on).
- Try to avoid getting hung up on complex analysis of every possible connection between problems – just ask yourself 'What are the main casual links?'
- Sometimes you will come across a factor that is a significant cause of several higher level problems, but try to select what you think is its main consequence and then place it in the hierarchy accordingly. If you decide that it really is such a major cause of more than one higher-level problem that to choose only one connection would be to overlook potentially important issues, then simply include it in each point of the hierarchy where it is relevant.
- For each related problem that you identify, ask yourself whether this is a cause of your starting problem or an effect of it (i.e. something caused by your starting problem). For the effects that you identify, arrange these similarly in a hierarchical way, so that the logic of cause and effect flows in a single direction – from the bottom of the wall to the top.
- Remember that a problem is not a lack of a solution, but an existing unwanted situation. If you find yourself starting to use the words 'lack of ….' or 'insufficient ….', think again. Try to be more accurate in identifying the real underlying problem.

Imagine a situation where you have identified a major problem where 'local crop production is low', then a causal problem statement that 'lack of suitable irrigation equipment' (however true it may be as an independent statement) is not very useful in helping you to understand the causes of the original problem. Indeed, at this stage, you may not be sure why local crop production is low – certainly, it might be connected with water supply, but it could equally be caused by a whole range of other factors (e.g. infertile soils, poor cultivation techniques, soil erosion).

However, if you are certain that water is a critical issue, then a problem statement that 'the plants affected by drought' might be a much more accurate and useful causal statement of the problem. To start talking about lack of suitable irrigation equipment at this stage (before the problems have been properly analysed) is to pre-judge the potential solutions. Even if drought proved to be the major problem, there may be a whole range of different solutions available (other than supplying irrigation equipment) including switching to other more drought resistant crops or varieties, changing existing irrigation techniques to make better use of the available water, etc.

- If you have sufficient people, split them into sub-groups to examine each of the higher level direct causes of the starting problem. Each subgroup can report back to the whole group, which can then discuss and seek to improve upon the sub-group's findings.
- It is very important to ensure that the problem tree clearly and objectively shows the relationships between factors and that everyone present broadly understands and agrees with the content and structure. A good way of achieving this is to get each of the sub-groups to re-examine the findings of one of the other sub-groups and then present it back to the whole group.

- Once you have drawn the single problem tree, there is then often a further period of discussion necessary to identify areas of overlap and omission. Everyone needs to feel comfortable with the overall structure and agree that it accurately reflects their collected analysis of the problems and the causal relationships. This process can take some considerable time and with a complex set of problems, it is right that it should do so. Time spent improving the problem tree will be time well spent as, only when the causal links have been made clear can the best solutions be identified.

3.4 Objectives

Objectives are statements of how you want the world to look when you have fixed a particular problem. For a small project, it might be straightforward to define the objectives from the problem statement.

Conventionally, in project planning, objectives are presented in the following hierarchy (for definitions see 3.6.1)

Each project should have:
- 1 overall goal
- 1 project purpose
- approx 4 – 10 results
- approx 4 – 10 activities per result.

Each objective needs to be written as a single-sentence statement of a desired future state. They should be Specific, Measurable, Achievable, Realistic and Timebound (SMART objectives). It is more common practice in project plans to use the past participle to formulate overall goal, project purpose and results, i.e. 'the conservation status of a species is improved' so that your objective describes how the world will look when you have achieved it. For activities, we conventionally use the present active tense, i.e. 'monitor the population of the species'.

3.4.1 Objectives tree

For more complex projects that require a problem tree approach, we recommend turning this into an objective tree. In the problem tree, problems are linked in a cause-effect relationship, which becomes a means-end relationship in the objectives tree (see Figure 8). Beginning with the starting problem in the centre of the finalised problem tree, each problem is reformulated into a positive statement (an objective). These can often be simple mirror images of the problem statements, especially where the problems have been clearly and precisely defined.

Objectives need to be written as single sentence statements of a desired future state. These have to be realistically achievable (but not necessarily constrained by the limits of the project you are currently planning). Such objectives may turn out to be something to aim towards in the longer term.

Some problem statements will not have meaningful equivalent "mirror image" objective statements. The translation of a problem, for example 'frequent drought', into an objective 'less frequent drought' is clearly not readily achievable and planners must search for meaningful alternatives such as 'introduction of drought resistant crops'.

The objective tree is best constructed using visualisation cards (Annex 2). The whole workshop agrees on the starting objective (i.e. the objective derived from the starting problem) and agrees the set of objectives immediately below by translating the direct causes of the starting problem into direct means to achieve the starting objective. Check the logic: are the 'means objectives' sufficient and necessary to achieve the 'starting objective'. Revise and add if necessary. The group is then divided into sub-groups, each reformulating the problems below one or two of the initial sets of means objectives.

Once the whole objective tree structure is constructed, the team should evaluate whether it is sufficiently complete and add more

objectives if necessary. It is important to recognise that new objectives, additional to those you derived from the problem statements, may now need to be added as a result of the objective structure adopted. These may be objectives that are necessary to achieve the higher-level objectives, but that are not directly identifiable as linked causally to the causes of the original problem you are seeking to address. Thus in our Treasure Island seabirds example (see figures 7 and 9), public attitudes to feral cats were not part of the causes of the initial problem. However, ensuring local resident co-operation and strong public support for the eradication programme will be essential to ensuring that you can achieve the objective of an island where the seabirds are free of feral cat predation.

An example of a problem tree in preparation (see Figure 7, page 54)

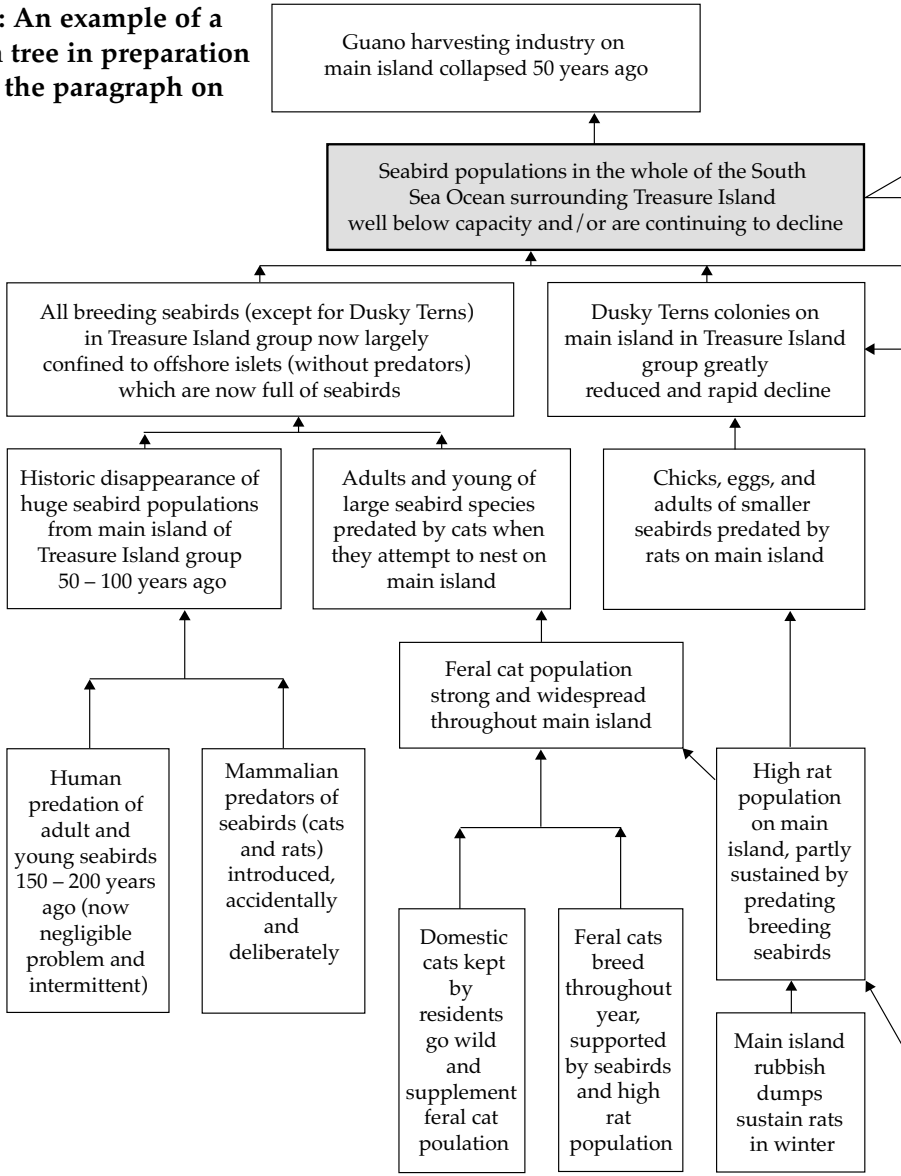
The status of several species of seabirds breeding on an oceanic island is reduced well below historic capacity. The central problem is the impact of alien animals but there are chains of linkage. Thus exotic rat populations in part support the feral cats when they are not feeding on seabirds. In turn, the rats are partly sustained by the dumping of rubbish when they are not also feeding on seabirds and their eggs and chicks. There are some wider problems too, as a result of over-fishing, by catch from long-lining and possibly the effects of climate change. The problem tree enables a simple visualisation of these problems and helps in the definition of potential projects.

An example of an objective tree derived from the problem tree (see Figure 9, page 58)

This has exactly the same structure as the problem tree. Each problem is restated as an objective, which is a description of a future ideal state. Again, there is a hierarchy at the higher levels, objectives describe future

preferred states of seabird populations. At even higher levels are some things that might flow from restored seabird populations such as the potential to develop guano harvesting or wildlife tourism. At the lower levels are preferred states of some of the problems. In some cases, these are quite close to single actions that would need to be taken (installation of rubbish incinerators). In other cases, a further complicated set of actions will be needed to achieve objectives such as the minimisation of causes of climate change.

Figure 7: An example of a problem tree in preparation (refer to the paragraph on page 53)



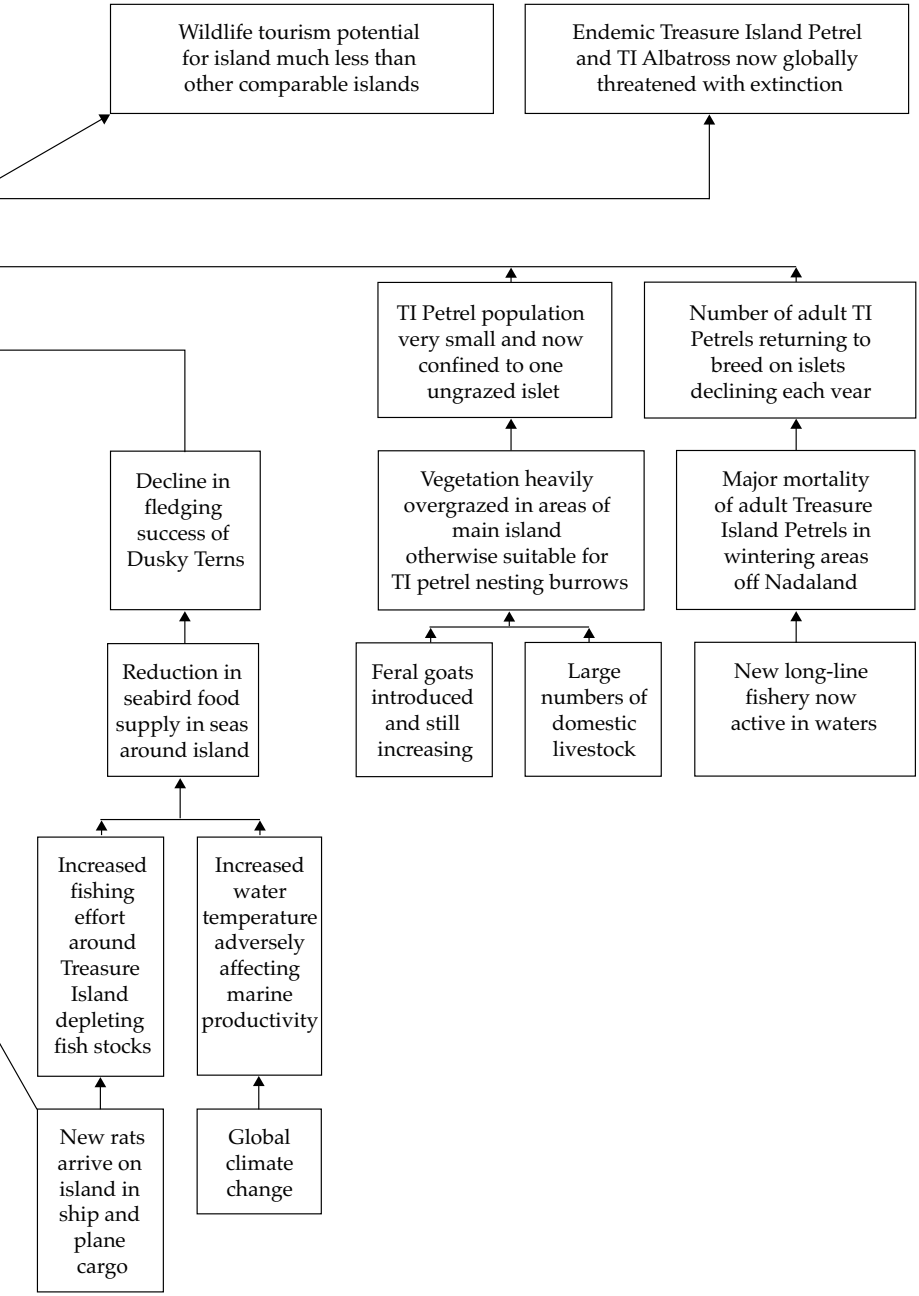
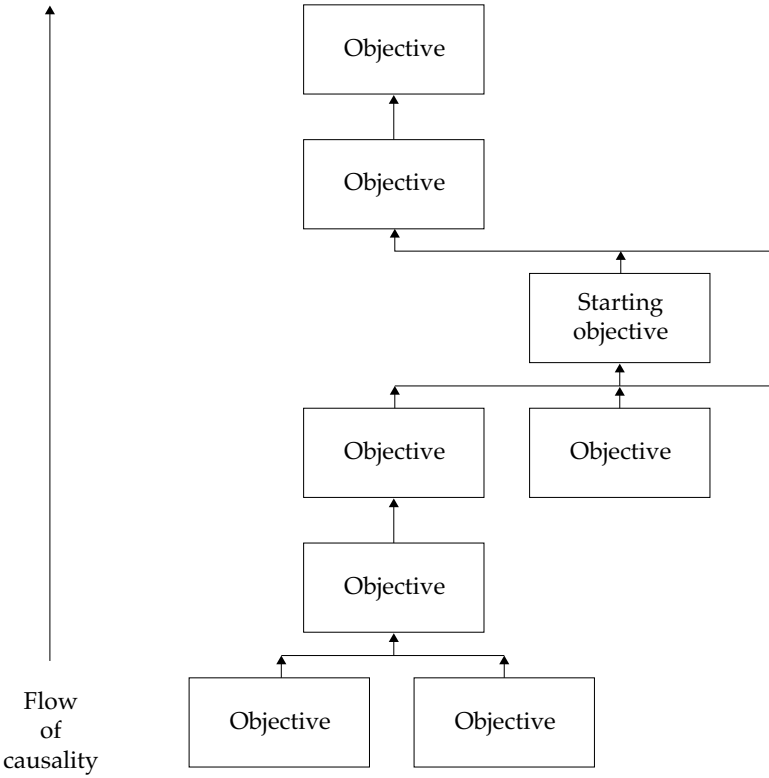

Wildlife tourism potential for island much less than other comparable islands
Endemic Treasure Island Petrel and TI Albatross now globally threatened with extinction
TI Petrel population very small and now confined to one ungrazed islet
Number of adult TI Petrels returning to breed on islets declining each year
Decline in fledging success of Dusky Terns
Vegetation heavily overgrazed in areas of main island otherwise suitable for TI petrel nesting burrows
Major mortality of adult Treasure Island Petrels in wintering areas off Nadaland
Reduction in seabird food supply in seas around island
Feral goats introduced and still increasing
Large numbers of domestic livestock
New long-line fishery now active in waters
Increased fishing effort around Treasure Island depleting fish stocks
Increased water temperature adversely affecting marine productivity
New rats arrive on island in ship and plane cargo
Global climate change

Figure 8: Objective tree: each problem is both a means and an end to the objectives above and below it respectively



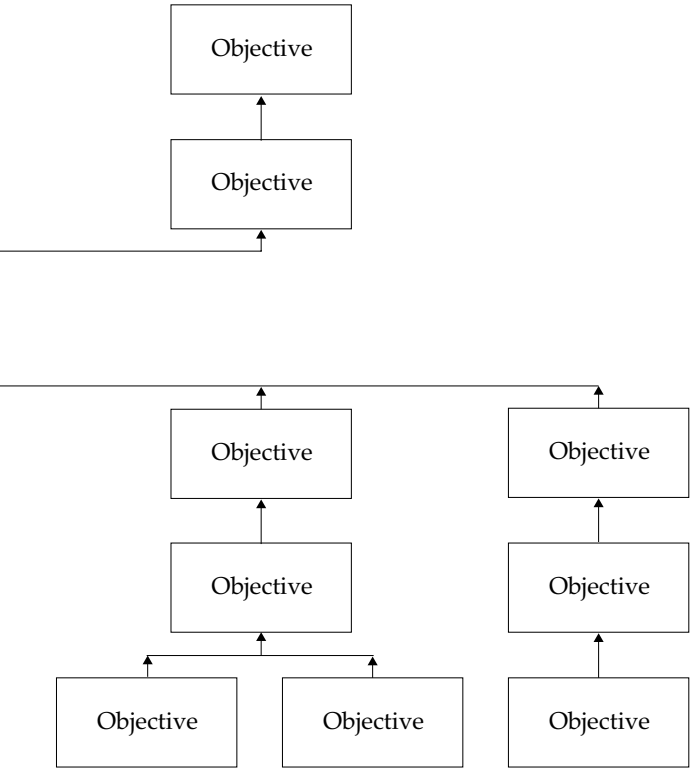
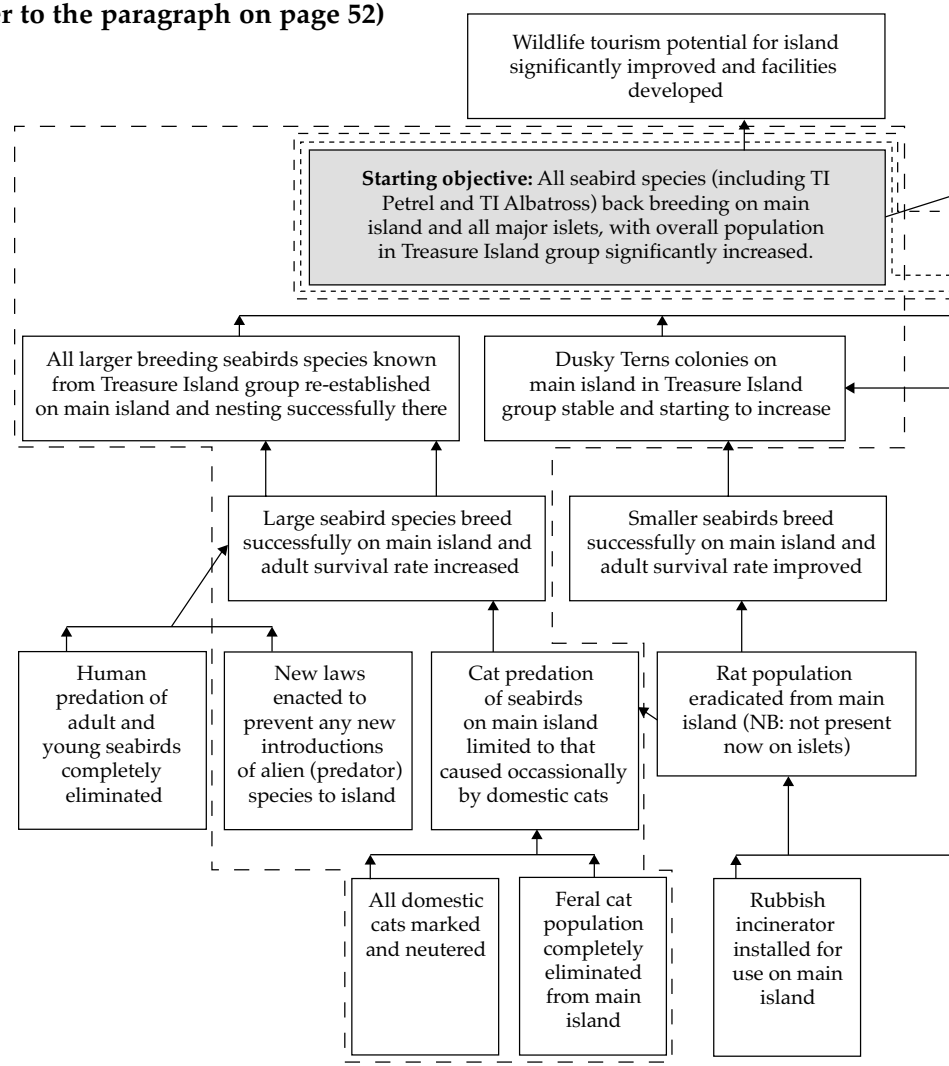
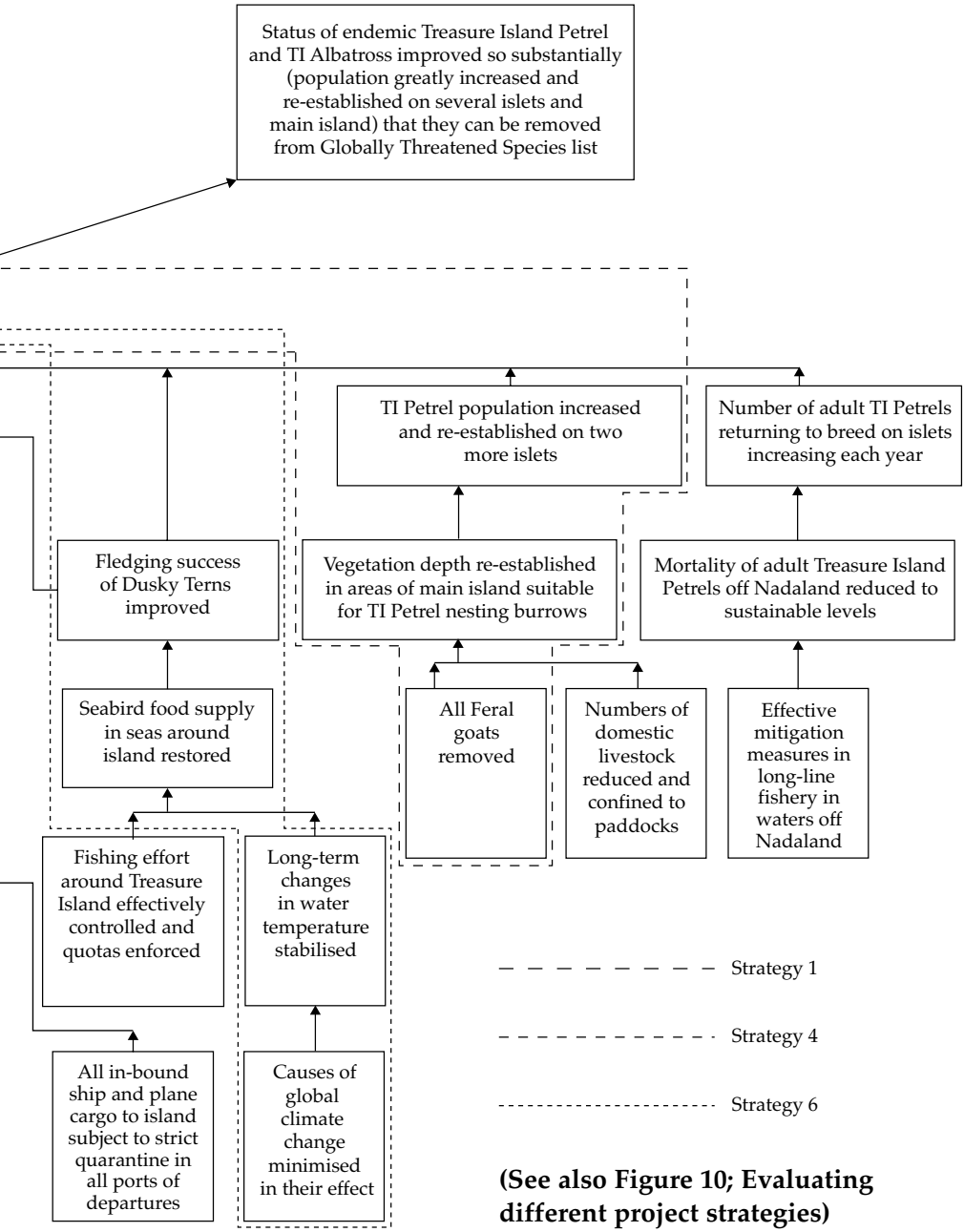

Objective
Objective
Objective
Objective
Objective
Objective
Objective
Objective

Figure 9: An example of an objective tree derived from the problem tree shown in Figure 7
(refer to the paragraph on page 52)





(See also Figure 10; Evaluating different project strategies)

3.5 Project strategy

The objective tree is a view of the ideal situation in the future when all of the problems have been solved. However, with limits on time, budget and resources, it is generally impossible for individual projects to address all these potential objectives. The project strategy defines those branches of the objective tree that the planning team agrees to be the most appropriate to pursue in a project. This may then form part of a longer-term programme which will seek to address the other issues.

How to go about deciding the project strategy

- This can be imagined by drawing around various sets of objectives as demonstrated in the example in Figure 9 and evaluated by means of the matrix, shown in Figure 10. Each set of objectives is a project strategy to achieve the respective project purpose and overall goal that relate to each alternative strategy.
- The planning team must now decide which project strategy to pursue. A way of evaluating options and agreeing on the project strategy is presented in Figure 10. Each project strategy is listed in a table and each in turn evaluated against agreed criteria. Criteria should be agreed among the planners and evaluation can either be done by consensus scoring or voting. The strategy with the highest score is the most popular project strategy.

The planning team must now agree on the project purpose (by definition the objective that the project will achieve); see further definitions on page 66. The planning team should evaluate how realistic it is for the project to achieve the project purpose within the framework of the available resources and expertise of the project partners.

The next step is to consider the overall goal, the wider objective which this project will contribute to, which overarches the purpose. Once project purpose and overall goal have been agreed, the planning team needs to decide which of the results (means of

achieving the purpose in the objectives tree) and activities (means of achieving individual results in the objective tree) are necessary to achieve the project purpose and therefore must be included in the project. The structure of the objective tree should clarify this. These objectives are then moved into the logical framework.

Different possible project strategies exist for the restoration of seabird populations on an oceanic island where exotic herbivores and predators have severely reduced numbers in historic times (see Figure 9 and Figure 10).

Eliminating different exotic species or combinations have different properties as an overall project. To have the impact on the seabirds, there is really no alternative to eliminating cats in spite of the potential public relations difficulties. Tackling rats at the same time will likely improve prospects for the smaller species and will be relatively cost effective because staffing efforts can largely be combined.

Removing goats as well might produce further benefits especially to vegetation but would add significant further cost because the field methods, staff skills and exact project location are different. Denser vegetation might favour seabirds but they might recover even with the goats present once the cats and rats are removed.

Control of over-fishing and minimisation of climate change might also be significant but tackling these would be very large projects. Much of the benefit to seabirds might be achieved without solving these two issues but these are untested assumptions.

Elimination of cats and rats together is chosen as the preferred project strategy. If things go well, goat

eradication might be considered in a follow up. It might prove necessary to tackle over-fishing if future research suggests that this really is sufficient to reduce the performance of the seabirds even after the predators have been removed. (N.B. This Treasure Island example is synthesised from two real projects.)

Figure 10: Evaluating Different Project Strategies
Different possible project strategies exist for the restoration of seabird populations on an oceanic island where exotic herbivores and predators have severely reduced seabird numbers in historic times

Project strategy	Technical feasibility stakeholders	Acceptance by
1. Permanent eradication of cats	Relatively straightforward	Some significant local and perhaps international discomfort and opposition
2. Permanent eradication of rats	Feasible but hard work to ensure complete eradication before ending poisoning	Fully acceptable to islanders
3. Permanent eradication of both cats and rats	As above combined	Any difficulty as for cats and above
4. Permanent eradication of goats	Relatively straightforward	Goats attract some sympathy but only limited opposition expected compared with cat eradication
5. Fishing harvest regulated	Politically quite complicated	With a valuable business involved, there could be strong potential opposition
6. Causes of climated change minimised	An exceptionally challenging global isssue	Considerable global political opposition

	Sustainability	Impact	Cost	Overall ranked order of preference
	All right as long as regulation ensures that all domestic cats are neutered	The bigger seabirds should recover; smaller species will probably still be limited by rats	High	2
	Will need perpetual; monitoring and safeguard at the port to ensure no future re-invasion	With cats still present, may not have such impact	High	3
	As above	Likely to be significant for all previously known seabird species	High but less than the total costs of tackling rats or cats alone because of shared staffing costs	1
	Repopulation unlikely	Vegetation recovery likely but birds may not respond in the continued presence of predators	Medium and largely independent of above because of different methods (shooting)	4
	All right once legislation and enforcement maintains quotas	Somewhat uncertain	Substantial	5
	A long way off	Uncertain	Enormous and any problems for our seabirds are not going to play a big part in the political debate	6

3.6 Logical framework analysis

Logical frameworks (or 'log frames') were developed in the late 1960s, originally by the US military, for project planning purposes. They were picked up and further developed by various development aid funding agencies and today are used by many such agencies and project managers around the world.

A log frame summarises the most important aspects of a project in a succinct, logical manner.

Badly used, log frames are filled in merely as an after-thought or as a formality required by a potential funder. This is not only a waste of time, it is also a wasted opportunity! Well used, they provide an excellent way of developing an idea into a clear, achievable project, summarising the main elements of the project in a simple, standardised format and then as a tool for managing project delivery and subsequent reporting.

As its name suggests, there are two vital aspects to a log frame – the framework and the logic.

- Framework simply gives us a standardised way of presenting all the key elements of a project in relation to one another.
- Much more important in many ways is how the process of developing the log frame forces us to expose the logic behind the project, defining its objectives and how these will be achieved and progress measured. Because it is put together in a structured, logical way, it also gives us an excellent tool to manage the project and, if any subsequent changes in the project become necessary, to ensure that we can fully consider the implications of such changes for the overall project plan.

The log frame enables us to show, in a simple, structured way, all the following essential aspects of a project:

- why the project is undertaken (goal and project purpose)
- what the project is expected to achieve (expected results or outputs)
- how the project is going to achieve these results (activities)
- which external factors are crucial for the success of the project (important assumptions)
- how to assess the success of the project (objectively verifiable indicators)
- where to find the necessary data for this assessment (sources of verification)

Using and valuing the log frame

A log frame is not carved in wood. It is a plan and, like any plan, it is only as good (or as bad) as the information and ideas you had available to you on the day you compiled it. It is a statement of intention, and thus we should only depart from it with good reason. It gives you a structured framework within which you can consider and assess the implications of any changes. Equally well, it is not a straitjacket, or something to be followed blindly just because (irrespective of what you now know) that is what you promised to the funding agency in the application. Your funders should be only too pleased to help if a change appears necessary, for example as new information comes to light, circumstances change, or the validity of the project logic or the influence of assumptions is tested – after all it is their money you are spending.

The tasks of filling in application forms, developing budgets, allocating responsibilities and preparing schedules also become much easier if a good logical framework is available. It can also ease the processes of project management, monitoring and reporting (see section 6).

Summary of advantages of logical frameworks

- Set out the project elements and the logical links between them.
- Reveal inconsistencies or oversights.
- Help with contingency planning.
- Act as a master tool, from which the budget, breakdown of responsibilities, timetable and monitoring plan can be developed.
- Provide a framework against which you and the funding agency can monitor and evaluate project progress.
- Enable the consequences of changes in a project to be planned and assessed.
- Make reporting processes easier and clearer.

Filling in the log frame

The framework consists of four columns and four rows. The columns should be completed in the order 1, 4, 2, 3.

3.6.1 The Objectives Column (Column 1)

Much of the information we need to fill in this column (the left-hand column of the log frame) comes directly from our objectives tree. Once we have identified the limits of our project within the overall objectives tree, the higher-level objectives, such as the project purposes and the overall goals and results and the activities can be lifted across directly into the project framework. In so doing we need to remind ourselves of the very precise meaning of these various objectives and to check that it they do accurately describe our intentions. As described on page 67, it is usually easiest to follow the sequence below.

Project purpose

This is the immediate outcome or the immediate change that will occur if all the intended project results are achieved. By definition, it is an overall description of the new situation that will pertain

(having been completely achieved) by the end of the project. It is the statement of the overall effect of the project.

Overall goal
This is the higher-level objective to which the project will contribute; thus, (by definition) it will not be entirely achieved by this project. However, the project will contribute towards the achievement of this wider objective. It is an identification of the wider impact the project will have.

Results
These are all the changes in state (and no others) that will need to have been brought about by the project if the project purpose is to be realised. These changes will have moved the situation from the conditions evident at the start of the project and the results are thus statements of those new conditions that should be evident at its end. They are the direct changes that the project will have delivered. In addition to the necessary results defined from your objective tree, it is a standard convention always to include one further result connected with the background management required to deliver the project. This is usually phrased something like 'project management processes established, implemented and maintained'. Having such a result is particularly important when it comes to work planning and budgeting the core costs of running the project and is a useful way of ensuring that you do not overlook these vital elements.

Activities
Result-by-result, this section will be a list of all the actions (and no others), which will need to take place if each of the results to which they relate are to be delivered. Activities are often also broken down into sub-activities, listing all the sub-activities necessary to deliver each of the activities. Frequently, however, these sub-activities will not actually be shown in the log frame, but are listed in the plan of action and are often the level at which budgets are constructed.

Once your workshop participants have agreed an overall structure and lists of the results and activities, it is a standard convention to then number them to show which relate to which. Thus, the results

identified from the Objective Tree are numbered usually from one to however many there are (usually 4 – 10). However, you will often see the standard 'project management result' (described in the paragraph above) included as Result 0. The lists of activities relating to each of these results are then numbered 0.1, 0.2, 1.1, 1.2, 1.3 or 2.1, 2.2, etc accordingly. Sub-activities relating to each activity are correspondingly numbered 1.1.1, 1.1.2, etc.

3.6.2 The Assumptions Column (Column 4)

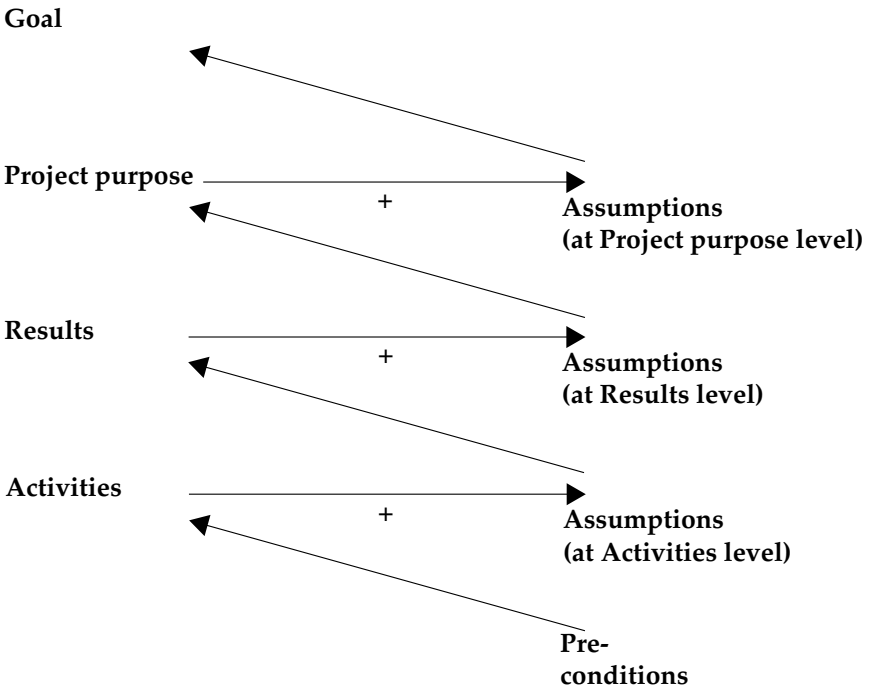
Assumptions are the external conditions that need to exist to permit the project to progress to the next level in the logical framework. Making correct assumptions about the external influences on the project is therefore very important.

Assumptions are factors relevant to an objective you are interested in achieving (i.e. they have the potential to influence its outcome) but which you either cannot do anything about or have chosen not to do anything within your project scope. They are thus often (but not exclusively) factors you have identified in your problem tree and objective tree, but which lie outside the proposed scope of your project results and activities, as defined in your selected project strategy.

Assumptions thus provide a method by which it is possible to deal with those factors outside the project, but which may potentially have a bearing on its future success. These factors are often those which, whilst not being directly affected by the project may have a direct influence on its implementation and sustainability, such as other stakeholders attitudes or actions (see section 3.2), and environmental factors (see section 3.8).

Figure 11 shows the way assumptions operate, within the logistical framework.

Figure 11: The operation of assumptions within a logistical framework



Those items identified in the objectives tree that could have some influence on the project, but which have not been included in the objectives column, need to be considered as potential assumptions. Where they are deemed appropriate they then need to be rewritten as assumption statements and entered in the assumptions column at the appropriate level. An assumption statement differs from the objectives statement, in that you are now assuming that the factor concerned will *not* have the causal effect that you earlier identified, which would undermine the achievement of the objective that you

have selected for action. Any other external factors that directly affect the project should also be identified and all assumptions assessed for their validity and suitability. It is often easiest to fill the assumption column from the bottom up.

It is crucial to fully analyse the existing situation before starting your project to be sure that your project plan will be able to achieve its objectives.

Pre-conditions
Pre-conditions are another important group of assumptions that you may have made before you start the project. They have the potential to significantly affect the validity and viability of your proposed solutions. They are often shown at the base of the assumptions column, below the activity level. Identifying the likelihood of any such assumptions proving invalid is an important part of the risk analysis for you to be able to even start your project.

Evaluating your assumptions
Having identified various factors as possible assumptions, it is then necessary to assess their degree of importance and likelihood to determine whether they should be included in the log frame as such. To do this we can use the algorithm in Figure 12.

Clearly, an assessment of assumptions is crucial to the validity of our project plan. It can determine whether our project is even feasible at all (if potential killer assumptions have been identified and assessed) and certainly are crucial to determine the necessary scope of the project.

A project plan is defined not only by what you decide to include in it, but also by what you decide to exclude.

Civil unrest or war is a major concern in some countries. In these circumstances an assumption 'there is no civil unrest in project area' is an important pre-condition. However, an assumption that 'no civil unrest arises in the project area during the project period' may be an important assumption at results level; an assumption that the achievements of the project are not subsequently undermined by civil unrest would be an assumption at the project purpose level (i.e. with the potential to affect whether your project did contribute towards achieving your overall goal).

The assumption 'no major drought' would be a reasonable assumption in some regions, but a 'killer' assumption in others.

Figure 12: Assessment of external factors as assumptions

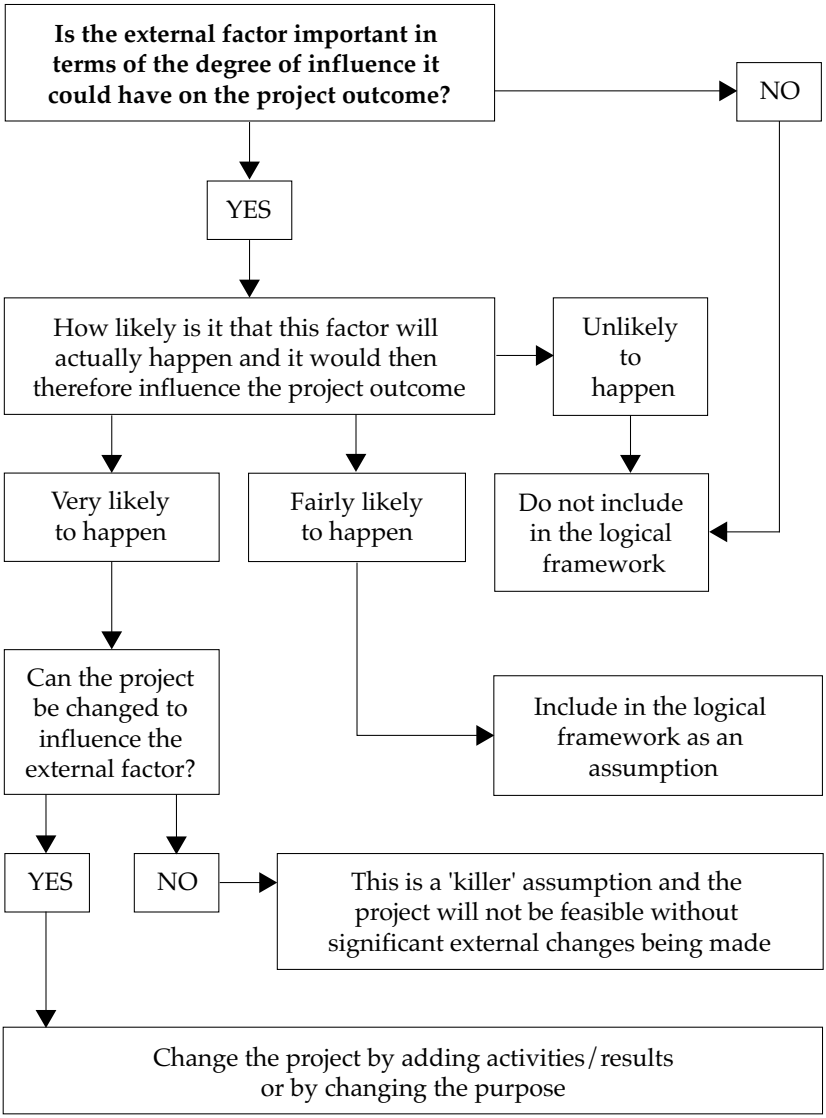


Figure 13: Logical framework

Summary of objectives/activities	Objectively Verifiable (OVIs) Indicators	Means of verification (MOVs)	Important assumptions
Overall goal A single objective, wider than that of a project itself.	What independent evidence will there be to show that the goal has been achieved?	Where and how to find the data in the indicators for the goal?	
Project purpose The single objective that will actually be reached by implementing the project.	What independent evidence will there be to show that the project purpose has been achieved?	Where and how to find the data in the indicators for the project purpose?	Which factors, not actually being addressed by the project, could be crucial as to whether achievement of the project purpose has the predicted impact on the goal?
Results Means to achieve project purpose and products of the activities undertaken. Typically, there are 5 – 8 results. Number them 1, 2, 3, 4, etc	What independent evidence will there be to show that the results have been achieved?	Where and how to find the data in the indicators for the results?	Which factors, outside the direct control of the project, could be crucial for the results to have the predicted effect of delivering the project purpose?
Activities All the tasks (and only those tasks) that must be undertaken to achieve the results. Typically, there are 4 – 10 activities per result. Number them 0.1, 0.2, 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, etc. to show which result each contributes to.	It is not necessary to complete OVIs and MOVs for activities. (Some funding agencies ask for project costs to be inserted in this space instead, but usually these are contained in a separate budget spreadsheet.)		Which factors outside the direct control of the project could be crucial to ensure that completion of the activities does lead to the achievement of the results?
			Preconditions Essential set of conditions that need to be in place in order for you to commence your proposed activities effectively.

3.6.3 Objectively verifiable indicators (OVIs) (Column 2)

These are the measures of your objectives that will tell you whether you are achieving them. They are the quantitative and qualitative ways of judging whether results, project purpose and goal have been achieved.

'Objectively verifiable' means simply that different people examining the evidence will independently come to the same conclusion. If possible, but taking into account cost effectiveness or ease of being able to do so, an indicator should seek to measure the impact of something rather than the process undertaken to achieve it.

Using indicators
Indicators specify the meaning of the overall goal, project purpose and results in terms of operationally measurable factors.
Indicators should:

- be easy and cheap to measure
- be independant of the activity of the project
- specify where they will be measured
- specify some sort of time limits and the intervals at which they will be measured
- specify the quality and quantity of what will be measured
- no indicator should be used more than once in the logical framework.

The indicators tend to become more detailed and specific in the lower levels of the log frame. No indicator appears more than once and each has a means of verification. For the more technical objectives, the monitoring data often have to be collected by the project because they would not otherwise exist from an independent source. Remember to add the activities necessary to monitor your objectives in the list of activities in the log frame.

3.6.4 Means of Verification (MoVs) (Column 3)

These are the sources of information for the Objectively Verifiable Indicators. They are usually documents, reports and other sources that make it possible to gauge the progress towards the planned results, project purpose and overall goal.

For each Indicator, an MoV has to be specified. Indicators for which no adequate MoV can be specified are not verifiable and must be replaced.

Outside sources must be accessible and of sufficient quality. If no outside sources are available (or they are insufficient), you will need to collect such information as part of your project. This is known as monitoring. You need to check to make sure that your activities include the gathering and reporting of the relevant data.

3.6.5 Checking the logic

The value of the process of compiling the log frame is not simply in the detail of each cell, but crucially in the logic that binds them together. Having completed the entire framework, it is then necessary to review the framework as a whole and check to ensure that the logic is consistent throughout.

Remember:

- the activities should be all (and only) those actions necessary to deliver each of the results
- the results should be all (and only) the changes necessary to deliver the project purpose
- indicators defined for the overall goal, project purpose, and results should show how progress towards these objectives would be measured; the quantity or quality of change should be sufficient to demonstrate that the objective of which it is the measure will in fact have been achieved
- it should be reasonable to assume that the assumptions are true.

If the planning has been careful and thorough, as soon as the pre-conditions are established you should be ready to start the project. The logic is that, when the activities have been carried out and the assumptions set at this level are proved to be correct, the results will follow.

Similarly, the success of these results will depend upon the accuracy of the assumptions made at that level. If both are fulfilled, the project purpose will have been achieved. Likewise, and assuming that the next level of assumptions are correct, the project purpose will have had impact on the overall goal.

By systematically working through and re-checking each of the four levels and the four columns, we should be able to assess whether our logical framework is indeed logical, that it contains all the elements it needs to contain (and only those elements) and that it overlooks nothing important.

An example of a log frame: seabirds on Treasure Island (see Figure 14 – page 80)

Returning to the example we examined in the problem tree and objective tree, we can now see how this translates into the logical framework. Note how the left-hand column shows a descending logic of objectives. The highest-level goals are desirable and might eventually be achieved after several more projects. This project, however, will confine its purpose to the restoration of the main island.

The project has decided not to tackle climate change (because this is not possible for a small conservation group) and not to tackle commercial fishing (because at the moment it is not clear how important this might be). That these issues will not have adverse impact then become assumptions if the activities when completed add up to achieving the objectives.

The indicators column make it clear exactly what is meant by the objectives. In many cases the means of verification will have to be monitoring work conducted as part of the project because there are no external source of information on birds and predators on this sparsely populated island.

Each result is achieved by activities with linked numbers. A new result and set of activities deals with management of the project rather than part of the logical problem tree. Additionally there has to be a result concerned with public awareness even though this was not in the original problem and objective trees. The killing of cats is sensitive so this must be taken into account.

The activities listed are not yet of sufficient detail to construct a work plan and budget but it is plain enough how these next steps would be taken.

Figure 14: Example of a completed logical framework: seabirds on Treasure Island (refer to the paragraph on page 79)

Project Title: Restoration of seabird colonies in Treasure Island		**Planning period:** *April 2002 – March 2005*	**Country: Treasure Island** **Prepared: 26 February 2002**
Summary of objectives/activities	**Objectively Verifiable Indicators (OVIs)**	**Means/Sources of Verification (MOVs)**	**Important assumptions**
Supergoal Seabird colonies on Treasure Island restored to pre-settlement levels	• Treasure Island Albatross population increased by 20% by t^{10} and species thus qualified for removal from globally threatened species list • At least 10% of the total Treasure Island populations of the same 5 seabirds species (see indicator below) are breeding on the main island by t^{10} (increased from 0% at t^0) • Continued total absence of feral cats and rats at t^{10} and beyond	• Seabird monitoring reports • Seabird monitoring reports • Cat and rat monitoring survey reports	
Overall goal Breeding range and populations of all seabirds within Treasure Island group significantly increased	• Treasure Island Albatross, hooded booby, grey booby, pink tropic bird and South Sea storm-petrol re-colonise main island by t^5 • Area of dusky tern colonies on Treasure Island increased 10% by t^5	• Seabird monitoring reports • Seabird monitoring reports	• Seabird population growth is not supressed by other human factors such as commercial fishing in the region • Effects of sea temperature changes (caused by global warming) do not significantly affect the marine food supplies of the seabirds breeding on Treasure Island

			• There is no major disruption to the programme or its subsequent impact due to changes in the human use of the island • No natural catastrophe (e.g. volcanic eruption or major tropical storm) affects Treasure Island and its seabirds
Project purpose Mainland of Treasure Island restored as suitable for re-colonisation by both large and small seabird species	• No predation of dusky terns by feral cats recorded in breeding season following cat eradication • If breeding attempt made by Treasure Island Albatross on main island of Treasure Island group in season following cat eradication, chick successfully reared • No other evidence (sightings, tracks, kills) of continued presence of any feral cats on main island in season following eradication (i.e. by end of year t^2) and this situation still maintained at t^3	• Seabird monitoring reports • Seabird monitoring reports • Cat and rat monitoring survey reports	• No other external factors cause chick loss

Summary of objectives/activities	Objectively Verifiable Indicators (OVIs)	Means/Sources of Verification (MOVs)	Important assumptions
Results 1. Project management structure in place	• Plan of operation agreed by project management • Activities carried out on time • Regular reporting	• Project management reports	
2. Widespread awareness and support for the Treasure Island Seabird Restoration Programme established both on the island and internationally	• Curriculum of island school uses local material on natural history of Treasure Island • Delivery of project is not hampered by any significant opposiotion • Number of press articles increased including significant national and international profile	• Teachers lesson plans • Press cuttings files in conservation group office and on island	• All residents, island users and other stakeholders continue to significantly support project and remain committed to maintaining a predator-free island
3. All domestic cats on Treasure Island neutered	• No domestic cats without collars by end of month 3 • No domestic kittens born on Treasure Island after end of month 3	• Veterinary monitoring report	• All cat owners on island are willing to co-operate with registration and cat-neutering scheme and continue to so co-operate in future
4. Feral cats eradicated from Treasure Island	• No records of un-collared cat sightings on regular night patrols after month 3 and throughout year 2 • No un-collared cats caught in regularly baited traps after month 3 and throughout year 2	• Cat monitoring report	
5. All rats eradicated from Treasure Island	• Regular 'chew-stick' surveys in all parts of main island show no further evidence of rat presence by end of t^2	• Rat monitoring report	

	• Surveys around dusky tern colonies show complete absence of any rat predation of eggs or chicks throughout first season following rat eradication programme	• Dusky tern colony survey reports	
6. Mechanisms to prevent re-introduction of rats and cats in place	• Legislation passed • Results of test run (simulation) drills show that all agreed measures are in place and being complied with effectively	• Published Statute • Random Inspections Reports • Drill Result Reports	• Effective measures continue to remain in place to prevent the introduction of rats, un-neutured cats and other invasive species that could threaten the seabird colonies (no drop in vigilance with time)
7. On-going seabird monitoring programme and monitoring for cat/rat evidence in place and implemented	• Regular monitoring reports produced	• Monitoring reports	
8. Programme of vigilance and contingency plan in place in case of deliberate or accidental re-introduction of feral cats or rats	• Contingency plan agreed by Island administration by month six • Responsibilities allocated	• Contingency plan • Work programmes	

Summary of objectives/activities	
1.1	Establish a Conservation Officer on Treasure Island to facilitate and monitor the implementation of the seabird restoration programme and other environmental projects
1.2	Establish the Project Steering Group and ensure input facilitated
1.3	Recruit and assemble contractor's team
1.4	Arrange logistics including flights for personnel and freight
1.5	Provide field equipment including vehicles (and maintain)
1.6	Provide office and accommodation for project staff on Treasure Island
1.7	Provide office equipment to island and maintain
1.8	Agree workplan/responsibilities
1.9	Implement and monitor work plan
1.10	Ensure timely reporting to donors and other stakeholders
2.1	Continue Education initiative with the island school
2.2	Promote project to wider public through local and international media
2.3	Make full use of island's and all participating organisation websites to publicise project
3.1	Registration and neutering of all pet cats
3.2	All apparently semi-wild cats identified if feral or domestic and status agreed with 'owners' to deadline
3.3	Implant chips to ID all pet cats
3.4	Provide reflective collars to ID all pet cats
4.1	Ensure public safety during cat eradication programme
4.2	Eradicate all feral cats using baiting programme
5.1	Reduce livestock numbers and limit their range to facilitate rat eradication programme by minimising risk to livestock
5.2	Install rubbish incinerator for use on main island to remove it as food source for feral cats or rats
5.3	Survey to establish current status and distribution of rat population on Treasure Island

5.4 Revise detailed work programme and for rat eradication project
5.5 Conduct aerial baiting programme to eradicate rats
5.6 Conduct land-based rat eradication programme to remove any remaining isolated rats or local groups
5.7 Maintain capacity on island to respond quickly should monitoring reveal any missed cats or rats during years 1 and 2
6.1 Amend legislation as necessary to minimise risk of accidental/deliberate re-introduction
6.2 Delineate responsibilities on island and points of departure to enforce procedures to prevent re-introductions
6.3 Ensure all transport links to island minimise risk of accidental or deliberate re-introduction
7.1 Produce and agree a monitoring strategy for seabirds on Treasure Island
7.2 Establish baseline seabird data before cat eradication
7.3 Collect on-going seabird data during and after eradication programme
7.4 Train and equip island staff to maintain seabird monitoring after end of project
7.5 Continue to monitor for cats using baiting, lamping and searches for predation evidence around seabird colonies
7.6 Continue to monitor for rats using 'chew-stick' surveys for 1 year following eradication to ensure clearance is complete
8.1 Introduce and implement monitoring strategy to ensure detection of any re-introduction of cats/rats
8.2 Ensure effective contingency system in place to deal with any re-introductions detected

Note: Precondition
- Confirmation of the complete co-operation of all residents, organisations and facilities on the island and those who operate vessels and aeroplanes to the island to help implement the project in all respects.

3.7 Resource inputs

Activities in the log frame can be broken down into individual tasks: In order to make planning management easier, tasks within each activity should be ordered in the sequence they will be implemented. Each task should be numbered, identifying its relevant activity and sequence.

e.g.

Activity 1.1	Remove all goats
Task 1.1.1	Establish number and distribution of goats
Task 1.1.2	Agree to compensate owners by purchase of goats
Task 1.1.3	Shoot the goats

etc.

While developing the project strategy and the log frame, planners will have taken the budget ceiling into account. However, it is now time to define in detail which resources in terms of human resources, material and finances are required to implement the project.

Inputs are calculated on a task-by-task basis. We suggest that the planning team lists the activities and tasks. Starting from task 1.1.1, the planners estimate which resources are needed to complete the task, i.e. number of person months for each project staff, material, and operation costs (i.e. funds required, such as fuel, travel). Once completed for task 1.1.1, proceed with task 1.1.2 in the same way, but add only additional resources. Remember, where a resource (e.g. a vehicle) may be shared across several tasks, to estimate the length of time (or proportion of the total) that this resource may be required to perform this particular task. Then add up these time allocations. You may end up concluding you need more than one vehicle, or be able to reschedule the timing differently so that the resource can then be available for each of the tasks for which it is required.

Activity/task	Human resources	Material	Operation costs
1.1.1	7 person months: livestock specialist		$14,000
1.1.2	3 person months: project leader	6 camera traps	$3,000
1.1.3	3 person months: marksman	shotgun	$6,000
Total resource requirements			

This exercise will allow you to estimate the total resource requirements for the project broken into component types, this then forms the basis of the budget.

Given information on the timing of resource use, it is possible to prepare a more detailed budget, (e.g. in terms of cash flow) when resources are required, and how these will compare with likely availability.

For each task, the planning team should decide on the timing of the implementation. Starting from task 1.1.1, the group should decide when this task is going to start, and when it is going to be completed. This timeline can be plotted in a chart as below.

	Year 1				Year 2			
Task	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
2.1.1								
2.1.2								
2.1.3								
2.1.4								

For the purpose of project planning, it is generally sufficient to divide the time line in quarters of one year for the duration of the project. This time plan should be reviewed and detailed in a monthly schedule at the beginning of the project implementation. The planning team proceeds in the same way for each of the tasks in turn. The planning team should take great care to ensure that tasks, which depend on the previous completion of another task, should be timed accordingly.

Once completed, the planning team should therefore re-check whether the timing is realistic in terms of time allowed for the completion of the task, and other factors such as availability of resources (both material and staff time) and season. The time plan should be reviewed after roles and responsibilities have been decided (see below) in order to ensure that the people responsible for implementing the tasks have sufficient time available at the appropriate time.

It is also common practice to include milestones or indicators in the time plan. Milestones are concrete achievements and allow managers to monitor the success of the project.

It is now time again for a reality check by asking the following questions.

- Do you have the necessary person power to implement the project?
- Is it realistic that you will be able to raise the funds necessary to cover all costs for material and running costs?

If you answer any of these questions with no, you need to go back to the log frame and adjust the plan accordingly.

3.8 Roles and responsibilities

For projects to be successful, it is imperative that project partners clearly understand their respective roles and responsibilities.

In order to assign roles and responsibilities for each task we recommend that project activities and tasks are allocated to individual project staff. Each task is listed in a table and for each the project team decides who is responsible for the implementation of the task and who contributes to the implementation. For each task, only one person or group can be ultimately responsible, but several can contribute to its achievement.

	Project partner or person								
Activity/task	1	2	3	4	5	6	7	8	9
1	X			X			XX		
2								X	XX

XX: responsible X: contributor

Once this process is completed, the planning team should ascertain whether the people that are responsible for implementing individual tasks have the necessary knowledge and skills. If appropriate, you may need to include specific training or recruitment of new staff in the list of activities. (Remember to include this in the log frame and budget.)

It is of crucial importance that the planning team decides on the overall project structure, by answering the following questions.

- Who is the main contact for the potential donor?
- Who can take decisions, if the plan has to be changed?
- Who monitors the implementation of planned activities?

It is a useful practice to try to draw a diagram that describes the project partnership, the organisations and individuals involved, and who is reporting to, liaising with or advising who about what.

Section 4: Fundraising principles

4.1 Why do people give their money away?

Fundraising can take many forms. Shaking a collection tin at someone and presenting a bid to a funding agency may seem poles apart in technique. But what they have in common is that in both cases you have first to convince the person who is giving the money that they would like to donate their funds to your particular project or cause. It is likely that you will have to win people over to the idea that your project is worthy of their support and that they would therefore want to contribute towards helping it succeed. Looking at it this way, fundraising is not really about asking for money. What you are doing is selling an idea.

4.2 Understanding types of donor

In order to select the appropriate potential donor for your project, it is important first to recognise that there are many different kinds of donors. Funding sources are established for varying reasons and clearly understanding the motivation behind a particular source is the most important step you can take towards finding the best donor(s) for your project.

Personal contributions

This funding source becomes more important the smaller the size of project and should not be underestimated. The higher you can target the percentage of participant contributions achieved, the better, but stay realistic, or your team members may decide they no longer want to join you. Do not keep the team members' contributions too low either. On an expedition, for example, if people really want to go then they will raise the money, and despite apparent high costs, a project is usually very good value compared with a holiday.

The general public
Fundraising events such as sponsored walks, competitions, dances, fêtes, raffles…the list goes on, can bring in lots of revenue, but can be very hard work. You have to make sure that the time and effort you put in will bring in a worthwhile contribution. On a small scale, selling t-shirts and other goods has proven successful in the past. Your friends are also likely to help out in whatever way they can, so ask them too.

Businesses
Getting money from this sector can be very hard work, but the effort can pay off handsomely. Start by looking at local companies. Write to named people (if you have personal contacts here, use them); make a quick phone call if you are not sure to whom you should be directing your request. A good idea is to make a follow-up call after sending your request to check it has got there and to further encourage a donation.

You may wish to consider getting in touch with companies that operate in the area or country in which you are working. Some companies will be interested in different kinds of projects to others. Research into these requirements can help you to target carefully where you send letters. The larger companies will receive thousands of requests a year so you want to be sure that you are not wasting your time, or theirs. Bear in mind that some businesses may prefer to give in-kind contributions or discounts on equipment you need, or services you want to use for your project. In-kind support such as transport, accommodation, matched-funded leverage is easier for people to give but is still worth a lot. Try to take advantage of this where possible as contributions like these could make a huge difference overall. (Don't forget to include the value of all in-kind contributions in both your project budget, subsequent funding bids and all reporting – see section 6). The Department of Trade and Industry's British Overseas Trade Board has offices in many cities that often contain libraries with directories of firms that are active overseas.

Charities, trusts and foundations
There are thousands of these across the world that will support conservation projects, so knowing where to start is the first hurdle you have to overcome. Many can be researched over the Internet through search engines, but also, in many countries, directories are available which provide information on those available, classified by area of interest. You need to check the kinds of projects each will support and check that your project is appropriate according to the criteria set by them – otherwise lots of time and money will be wasted applying to them. Some will merely require a detailed letter, but others will require you to write more complex forms and proposals. Many trusts are very specific such as your own university fund or one local to your own home area – go for these as they are likely to be less competitive.

Aid agencies
This source of funds is mainly for larger-scale projects. It often entails filling in long, complex forms and compiling very detailed proposals, but the rewards for doing this correctly can be enormous. Sources include multi-lateral-aid programmes (such as United Nations Development Programme, Global Environment Facility or the European Union) and bi-lateral aid programmes (such as government overseas programmes including USAID in the United States; DANIDA from Denmark) and schemes like the UK-based Darwin Initiative run by the Department for Environment, Food and Rural Affairs. You should look very carefully at their criteria, as, for example in some cases, if you are not a registered charity in the source country, you may not be eligible to apply (see below). Country delegations (Embassies, High Commissions, etc) often have discretionary funds that they can put into projects in-country.

Media
This is not usually a direct source of funds, but publicity and awareness raising can certainly help to leverage funds for your project. Things you need to think about here are getting your image right (looking as if you have the ability to carry out a worthwhile project for a needy cause), finding a good story or angle to your project, and finding the right level of media. Examples include: local

and national newspapers and magazines, websites, TV, and radio. If you can make any links with famous people, or can link your project with another major current issue, the media might be more interested in taking up your story. A word of warning here – be careful to ensure that what you say cannot be misrepresented, as this may then have a negative overall effect on your fundraising effort.

Other support
You do not have to complete the task of finding the most appropriate donors for your project alone. There are many people out there who should be able offer help to get you through this process, and this opportunity should not be wasted. For instance, look at previous reports and ask people who have successfully raised funds for previous projects similar to yours, as they are often a particularly helpful source of advice. They may be able to suggest funding sources that are particularly sympathetic to your chosen project area, or give you other useful ideas and contacts.

Understanding the funders
In this manual we concentrate on procuring funding from funding agencies such as charities, trusts and aid agencies, as these are often more complex sources, which can yield huge paybacks if they are approached in the right way. If such agencies do not disburse their grants, they will have failed in their objectives. So they need people (like you!) with good projects that they can fund – without this they cannot do their job! Our challenge is to convince them that it is we who have the best projects to help them spend their money and thus to help them achieve the objectives for which their budgets were allocated. If you find them a good project to fund, you are doing them a favour.

4.3 Key donor criteria

For each funding source, it is essential to gather certain information to be sure you can accurately understand what kinds of projects each of them is going to want to fund. Only then can you make

sensible, informed decisions about which is the most appropriate avenue to take for the project you have in mind. Once you learn how to go about it, this kind of information is often surprisingly easy to gather. To avoid being deluged in detail it is important to set about collecting it in a systematic way and tracking down only those facts completely necessary to make a well informed decision.

Looking at funding agencies, for example, you should ask the following questions.

- **What are the main objectives of the fund?**

This is usually the most important piece of information you need to gather. It is what explains the motivation behind the funding agency, budget-line or trust that you are thinking of approaching. What objectives are they looking to achieve with their funds? What overall areas of work do they wish to support? Are there any particular areas of focus – countries, regions, types of project (e.g. environmental education, protected area management, species conservation). Do they have any particular priorities that are special to the current funding round? Match your project as closely as you can to each of these criteria and see if you can convince yourself that they fit. If you are struggling to do so, try again, but if you are still struggling to do so, find yourself another funding source. If you can't even convince yourself, you are very unlikely to convince a funder that your project is relevant to their priorities.

- **What types of organisations/individuals are eligible to receive funds?**

Is the funding available to all types of organisations or individuals? For example, for some budget lines only government agencies can apply, for others only NGOs. The NGO may need to be registered in the same country as the funding agency concerned. Conversely, sometimes only organisations based in the overseas country where the project will take place are eligible to apply. Such criteria are often very inflexible, so if you don't meet them, don't waste time filling in the forms and choose another funder to approach. However, if you have other project partner organisations, consider whether one of them might be more appropriate to become the

applicant or whether you could widen your project partnership to include an organisation that would be eligible to apply. Before you go too far, however, make sure that the organisation you have in mind would be willing and able to take on becoming the applicant and administering the grant contract.

- **What is the preferred project length?**

The minimum and maximum length of projects supported are usually fairly fixed criteria. They are usually clearly stated in the funding agency publications (or websites) but, if not, can often be deduced by checking lists of projects they have already funded.

- **What is the usual grant size?**

Again, most funding agencies make this clear in their guidelines. Take careful note of such details, as budgets are often rigidly fixed, so there is usually not much point in trying to see if you can bend the funding agency rules. If the grant size limits are not obvious, again they can often be estimated from the lists of grants allocated previously. Remember, if a funding agency is new to you, you are also new to them. They may want to give you a grant, but may be cautious about allocating a large grant to you following your first request. Commonly, they may give you a smaller grant initially until they see how well you manage it.

- **Can you apply for full grants or part grants?**

Some funding agencies will fund 100% of the project costs, but they are in a minority. Most are looking for some kind of commitment of matching funds (also known as co-funding, or co-financing) from other sources. There may be an insistence on at least some of this being in the form of committed real funds, or they may be willing to allow varying amounts of input 'in kind'. This might include, for example, existing staff time, overheads or provision of office accommodation. The rules may vary as to how confirmed other sources of funds need to be by the time of your application to the main funder – some may accept an undertaking to raise the additional funds elsewhere, others may require legally binding agreements with the other funders to already be in place before they will even consider your application.

4.4 Other things to think about when raising funds

(See also section 5 for discussion of how to plan and manage some of these aspects.)

- Deadlines (submission deadline, submission to decision period, lead-in time to funding release).
- How are the funds dispersed (up-front, or phased, any final payment retention)?
- How is the funding decision made, where and by whom?
- Are there any special application procedures (e.g. direct full bid or concept paper then full bid)?
- Are there special application forms and, if so, how do you get hold of them?
- Are there any other special requirements (e.g. bank guarantees, new projects only, incremental costs only, quarterly reporting)?
- Be timely and intelligent in applying for funding.

One conservation team used high international media coverage of cyanide spillage into local rivers to secure government funding for their project.

The same team used the exposure of their project to demonstrate to their university department how important it is to educate school children in conservation. The good profile that this gave to the university department enabled the team to secure university office space and use of the university computer network for a proposed follow-up to their conservation project.

4.5 How to extract important information

You will often want to make comparisons between funding agencies but, unfortunately, there is no standard way that all of them use to present their information. You will find it useful therefore to develop a uniform way of extracting the data for yourself. This not only has the advantage of recording the data in the same way for each different donor, but it also helps to highlight the aspects you do not yet know but need to set about trying to find out.

Sources – printed, websites, word of mouth
Although some of the literature may seem a little daunting at first, most of the kind of information you need is usually remarkably easy to obtain. We should really not be so surprised at this – remember it is the funding agencies' job to give away money – so it is in their interests to make it as straightforward as they can for potential applicants with projects to find out about funds available.

Most funding agencies produce printed booklets describing their aims, guidelines and budgets. Increasingly commonly however, all this sort of information is rapidly going over to being available through the World Wide Web. Some funding agencies now only make their information available this way, with even their application forms being directly down loadable from the web. Regular routines of web-checking favourite sites are well worth establishing therefore, especially for those funding agencies whose criteria particularly lend themselves to the kind of project you normally do. You must be sure that your information about the funding agencies is as up-to-date as possible so you can make sensible decisions.

Once you have checked for published documents and other information available, either in hard copy or from the web, you may still be left with some unanswered questions to help you determine if this is the right funding agency for you. Now might well be the time to telephone or e-mail direct to the funding agency with these specific enquiries. The staff are usually very busy people but, notwithstanding this, you will often find them approachable and

more than willing to help. Indeed this is almost invariably the reaction you will get as long as you can show that you have done your homework beforehand.

By reading a donor's literature or website thoroughly, you will then only need to ask specific questions to fill in the few remaining gaps in your understanding.

Bearing in mind that they want to disperse their funds, it is in most funding agencies interests to enable potential applicants to understand the kind of projects they wish to fund. As well as the published criteria in booklets or websites, many funding agencies will also have information readily available on projects they have funded in the past. This kind of information will help guide you as to whom and what kind of projects they will support, and may also be a source of contacts for people who have carried out similar projects who may be able to give you advice.

4.6 Production of a funding proposal

The next stage is to put together your funding proposal. For each funding agency you apply to, you will need to pitch your proposal at that particular source. This may mean that for a donor with more of a science interest, you will need to emphasise how your scientific research will fit into national and international conservation priorities. Similarly, you would be wiser to highlight any community development related work you are doing in your project area for a development aid donor. The following section advises on the content required for most funding proposals, but you should make sure that you fulfil the specific content requirements for each individual donor.

Why you, why them?
Having identified a potential match between what you want to do and what the funding agency apparently wants to fund, you need to explain to them why and in what ways you believe this to be the case. Do not be shy about this! If you think you have a good project that should interest them, explain why you believe this to be so, very clearly and concisely.

- Explain why it is appropriate that you or the organisation you represent should be doing this particular project, what is your track record in this area of work, what is your interest in it and how does it relate to the interests or similar activities of others.

- Explain why and how you believe your project fits the funding agencies' criteria – do not be diffident about this but assert your belief in the degree of fit and tell them why they should fund your project. If you appear to be wavering or uncertain yourself as to whether your project fits the criteria, you may be giving the funding agency all the encouragement it needs to fund someone else's project instead!

Some tips for achieving this can be found in the box below.

Telling it the way it is
- Avoid writing in the passive tense.
- Avoid trying to appear clever by using unnecessary long words or special jargon.
- Keep sentences as short as you can.
- Structure your document clearly into Sections and Paragraphs, all clearly titled and in a logical order.
- Don't let the funding agencies' criteria dictate the structure (or worse still the content!) of your project.
- Read the application guidelines very carefully and note and respect all special requirements.

Telling it the way you think they want to hear it – how can you know this?

- Check your application text against the funding agencies, published criteria; try as far as possible to use the same kind of vocabulary in your bid as they do in their funding guidance documents.
- Create a checklist of their criteria and try scoring your application against them – you will be mimicking one of the steps the funding agency will almost certainly undertake themselves. Try to put yourself in their shoes and imagine them trying to judge how well your project matches their priorities. Have you made it easy for them to do this and easy for them then to come to a positive conclusion?

Project outline

You should by this stage be clear enough about the aims and objectives of your project to be able to summarise all the main points of your project in a very concise way. A useful approach to summarising your plan is to include a sentence on each of the who, what, when, where and why's of your project. This will provide a skeleton outline of what you are proposing, which will be quickly understood by a reader, or listener on the other end of the phone. If you can manage to sell your project in just a few words at the start, you should be able to hook your potential donor's interest and impress them before they get into the detail – remember that first impressions count.

4.7 Contents of a typical bid for funding

The contents of each particular bid will vary, but for most there is a core of sections common to all. Funding agencies differ in the way in which they ask for this information to be presented – some prefer textual descriptions, others for information to be tabulated, some a combination of the two. Sometimes the forms themselves will ask only for basic information, with the detail to be included in an

annexed Business Plan. The following list includes the majority of the elements that you may be asked for (or should consider including):

Front cover with:

- title (think carefully about this – keep it short and accurate)
- photo (optional) of site, habitat, species or activities (to bring subject matter of your bid alive)
- names and logos of project partners.

Title page (optional – to give more details than possible on cover).
Contents list and page numbers.

Summary (Only one page, but the most crucial part of the document. Ensure that you give yourself plenty of time to make a good job of writing this. If you don't, it may be the only part of your bid document that is read at all!)

Application forms:

- background
- justification, threats, problems to be addressed
- wider context, e.g. government policies, plans
- description of project area
- importance of habitat, species concerned
- previous conservation action for this species, habitat or site (by you or others)
- objectives of proposed project (overall goal, project purpose, results)
- activities proposed to achieve these objectives
- plan of operation
- budget – expenditure and financing
- project follow-up, sustainability of impact
- risks and assumptions.

Annexes (with list at beginning and numbered dividers between – you may not need to include all of these):

- business plan (normally only where required by the funding agency)

- logical framework (if not asked for in main body of application)
- map(s) of project area showing wider location and detail (especially featuring any particular locations of proposed actions)
- photographs (only if useful to show specific issues)
- relevant previous experience of applicant organisation, proposed project partners and (if appropriate) particular experience of proposed individuals who will be executing project
- management diagram to show structure of the project and linkages between partners and individuals (including lines of reporting)
- letters of support
- short scientific papers (but only where these clearly demonstrate the context of justification for the project)
- abbreviations used.

What to include and what not to include
Only give enough detail (and no more) to tell the story convincingly – you will not be thanked for burying the recipient in paper by (mistakenly) trying to impress them with how much information you have. Much more valuable is if you can show how you have been able to extract the essential details that the potential funder needs to know in order to assess your project. You can always quote a few key references if you think they may want to check on certain aspects, but don't depend on this to sell your project as normally most fund managers will not have the time to follow up such information.

Understanding the forms
Having the documents available directly from the funding agency's own websites can make their immediate accessibility less of a problem. It also presents the possibility for making them much easier to fill in electronically and, thankfully, increasing numbers of agencies are embracing this option.

On the other hand, some other funding agencies have unfortunately taken it more as an opportunity to make the electronic files format of their forms increasingly sophisticated. This can make some of them intellectually challenging to use, on a scale from entertaining to extremely frustrating! In fact, despite their prime function, surprisingly few forms to date seem to have been devised to ease the task of the poor soul trying to fill them in and one can only hope that they are better geared to the needs of those having to read them. Some forms are easy and obvious; others, however, are obscure and sometimes for no discernibly good reason.

Whichever category the forms you are faced with fall into, follow their layout and the instructions for completing them as precisely as you can. They may seem like a test of fitness ('if you can fill in our form, you might just be capable of running a project'), but usually they are designed to gather the information that the funding agency needs to understand, assess and make a decision about your bid. So, as far as possible, do exactly what it says on the form. In the final analysis, if you really do not understand what they are after in a particular section, ask them!

Prepare yourself for the need sometimes to just strengthen your determination to get the forms completed and be prepared to battle through difficult ones.

4.8 Budgets and time plans

Getting a basic budget and timeplan worked out as early as possible will help you. It seems obvious, but before you start asking people for funding you need to have a clear idea of how much money you are going to need!

These early plans can be changed at any stage, as you gather more detailed information, but at least you give yourself a working model, which as you plan, steadily improves in its meaningfulness

and accuracy. A main benefit of the budget exercise is that it often forces you to get your thoughts together on specifically what activities need undertaking, in which order, and the costs that each of these activities will incur.

Time and resource planning (see section 3.7) are essential precursors to constructing the budget, but then once you start to get all the numbers together, you need to introduce some means that enables you to manage them in an orderly way.

Microsoft Excel or similar spreadsheet programmes are invaluable to help lay these out and add up the sub-totals in all the various ways you may need (by site, by partner, by type of expenditure, by time period, by objective). Here you can set up charts, mark out timeline charts, and milestones of achievement, etc. Get the budget and time plan as detailed as you can at this stage and create the overall totals by adding up this detail. Figure 15 shows an example of a very simple, basic budget for a project to give a few ideas of some of the budget headers you might need to consider including at this initial stage.

Bear in mind that the funding agency may have a particular budget format to follow – make sure you are fully aware of what this will need to include. You can then structure the detailed categories in your budget spreadsheet to make sure they are compatible with the funding agency budget format.

Figure 15: Example of a project budget

Budget		
Project Preparation Expenses		
Administration/Prospectus/Proposal		£300
Insurance (£50/per head 6)		£300
Medical		£250
Scientific Equipment (a camera & a lens)		£1,130
Photographic		£340
Maps		£400
Video Tapes		£340
	sub-total	**£3,060**
Field expenses		
Living cost (1,320 man-day £5 @ day)		£6,600
Local Assistants (600 man-day @ £5/day)		£3,000
Travel Allowances		£1,000
Vehicle Hire		£1,000
Miscellaneous		£350
	sub-total	**£11,950**
Post-project expenses		
Administration		£150
Photographic		£200
Report Production		£300
Videodisc making		£600
Contingency (10% of budget)		£1,626
	sub-total	**£1,250**
	Overall Total	**£17,886**

4.9 Making a good first impression – do you look the part?

It's an old joke, but the adage 'you never get a second chance to create a first impression' is unquestionably true. It is very important therefore to consider what sort of first impression you want to create.

There are those who maintain that in a funding bid you should be sure not to look too professional or flashy for fear of giving the impression that you already have too much money and can find nothing better to do with it than produce expensive-looking funding bids! Certainly, presentation is not the most important issue, and this is especially true if effort has been directed towards it at the expense of ensuring the quality of the content. Equally well, you should remember there is very much more to looking deserving than simply trying to show that you do not currently have sufficient funds to compile an organised-looking funding bid.

It is all about balance. There must undoubtedly be some kind of credibility threshold where such a negative reaction by a potential donor might kick-in. However, it is far more important to create the impression that you are competent, you know what you are doing and that you are taking both the project and your potential donor seriously. Furthermore, if you were to get the grant, you want your donor to be confident that you would have the capability and dedication to deliver the project and undertake all the appropriate actions to efficiently service the grant source.

With increasingly widespread access to modern computers and reprographics facilities, creating a good impression does not necessarily mean spending a lot of money. It is much more related to getting yourselves organised and giving enough time and attention to detail in how you plan and present your bid.

There is, for example, no excuse whatsoever for spelling and typographic mistakes. A spell-checking facility on your computer (available in many of the world's languages) should help pick up the majority of such errors. It is also good practice to get someone other than yourself or better still outside the group of you who are involved in writing the bid, to proofread your final text for you before you submit it. The common cry of 'I didn't have time to do that' actually means 'I did not allow enough time in my planning of

the bid development process so that I would be able to properly spell check and have the text proof read'.

To submit your funding bid with spelling mistakes strongly suggests something negative about how organised you are. Worse still, it may risk giving the impression to the potential donor that you did not regard your bid to them as important enough to undertake such a simple check before submission.

Even more importantly, ensure your bid has a good clear structure and carefully follows the application form instructions. These all help convey the positive impression that you are competent, caring and capable of following guidelines and of delivering the project you have proposed.

4.10 Submission

You will not be able to continue working on your funding proposals forever. At some point (as the deadline approaches) you are going to have to part with your work and submit it. This can sometimes be difficult, because you may feel that most of the detailed planning is still to come, so some specifics might not yet be at your fingertips, whilst other details might significantly change after you have posted your bid. Donors will understand that this is often the case, so if you have at least shown that you have taken this into account, they will gratefully receive your best efforts.

Deadlines mean deadlines

Most donor agencies will have deadlines for submission of projects on an annual or biannual basis. Even if they are prepared to consider late applications at all (most do not) donors will not be sympathetic to proposals that arrive after these dates, and it will give a very bad impression of yourself and therefore your project. If you plan well, your proposal should be completed some time before the submission date, so you have time to check it with others and

make improvements. You want to look like you are capable of organising and carrying out a project, so show them that your planning is well timed and that your proposal doesn't require any excuses.

Covering letters
Covering letters are attached to your full proposals and give you the chance to introduce yourself. They vary depending on what kind of funding source you are applying to, and some require more detail than others. It is important to create a good impression, as this is the first thing the potential donor is going to see of you. For this reason, make sure the letter is laid out clearly and neatly, using just one sheet of headed paper, and that it is addressed to a named person if possible. Your letter should contain the following:

- who you are
- what you plan to do and why
- why should they (the potential donor) consider helping you
- the total you are trying to raise, and what it will be spent on
- what you want specifically from the donor
- anything you can offer in return: publicity, reports etc
- your contact name, address and telephone number
- offer of more detail if required.

Waiting for the decision
Once you have submitted your bid and received confirmation of its receipt, you could just relax and forget all about it…but what if that particular bid is not successful? You certainly shouldn't be pinning all your hopes on one application (even if you are pretty sure that it will be successful). Instead of putting your feet up, or worse, constantly worrying about the result, spend your time wisely. Continue your search for further funding avenues, continue to improve your project plan, whilst patiently waiting for the response from the bid you have just submitted.

When the decision comes
If the response is negative, make sure you find out why. See if they have some constructive suggestions for you. It is important that you learn as much as possible from each attempt, successful or

otherwise, so you can make improvements for the next one. Congratulations if you get a yes! The paperwork does not necessarily end here though ...

4.11 Contracts

Often contracts are set up to make assurances that the money you have raised is going to be used as you have stated. Contracts made with donors always include, amongst many other things, the terms and conditions of the exchange of money.

These may include:

- clarification of how and when the funds will be paid
- request that the donor be informed of any significant project changes
- clarification of with whom any liabilities lie
- insistence that the project team should not break the law and should obtain appropriate permits for the work
- request that the project is undertaken in an ethically, environmentally and culturally appropriate way
- clarification of publicity rights and obligations
- clarification of expectations – for example, they may expect a report after certain time periods
- reservation of the right to take the money back if the conditions stated are not fulfilled.

Another situation where contracts may be appropriate is between other partners involved in the project. It is always a wise decision to clarify in writing how the money will be managed and divided, who is responsible for what and by when and lay down some general practical guidelines.

Make sure you read all the paperwork contained within these kinds of contracts very carefully, and seek professional legal advice if anything is not clear to you. You do not want to find yourself signed up to a contract with the devil, where you are expected to compromise your principles for the money you have secured. If it is

a flexible contract, make sure that it is working for you, not just imposing a whole list of restrictions on your project.

4.12 Donor relations

You are interested in getting your project funded and therefore being able to make it happen. Funding agencies are interested in finding suitable projects that meet their criteria and so disburse their funds to achieve the purposes for which their budgets were established.

In fundraising, the funder/recipient relationship has to be one of partnership. Like all good partnerships, it needs to be based on mutual respect and trust.

Once you receive a grant from a particular funder, don't forget them! It is very important to keep in mind this partnership ethic throughout the project. Keep them informed of how the project is going, and invite them to see it on the ground. Remember that the funder wants your project to succeed every bit as much as you do – it is their money you are spending! That also means they have a vested interest in helping you, even when things are not going so well. If your project is struggling, don't be afraid to discuss this openly and honestly with the funder – they may be able to provide just the help and experience that you need.

This is a two-way deal. You need to cultivate these relationships, and try to help donors achieve their objectives too.

The list below summarises some of the points made in this section and includes tips that can be very easy to forget.

4.13 Fundraising Basics

Some basic fundraising tips.

1 Fundraising takes a long time – get started as soon as possible.
2 Get help from friends where possible. Use people you already know who might be able to help.
3 Get recognised experts to support your bid.
4 Think creatively, and act professionally.
5 Concentrate on clearly explaining your ideas, but don't spoil the impression with careless finishing skills e.g. watch your spelling, grammar and layout in letters and bids.
6 Write follow-up letters to those you have approached for money, successful or otherwise.
7 Remember to thank those who sponsor you, and keep them up to date as they will then be more willing to help further.

Conclusion

Fundraising is very hard work and funding sources are often very competitive. Try not to get downhearted if you are not successful with a particular bid – learn from your mistakes and show your enthusiasm and commitment for your project by persevering. Keep your mind open to new funding opportunities all the time, keep talking to people about what you are trying to do, and eventually you are sure to reach your target. Best of luck!

Section 5: Project implementation

5.1 Managing the money

Much project development time is spent producing budgets and trying to persuade donors to invest in your project. Money may well be one of the most important factors in implementing your project successfully; it can also cause a lot of problems if it is not dealt with properly. This section takes you through the financial cycle, identifies some of the key issues concerned with managing money and offers some ideas for making financial management as simple as possible.

5.1.1 How the money comes: disbursement by the donor

It is useful to check with donors how and when they will provide payments. This process is often called disbursement. Payments come in a number of ways and this will affect how you plan and manage your finances. It is important to find out in advance how the money will be delivered. Typical ways are as shown in the following table. (Figure 16).

Figure 16: Different types and disbursement of project funds

Type of disbursement	What happens
All in advance	The donor sends the cheque before you start. Frequently used for small grants or short-term projects.
Most in advance	You receive most of the money (normally around 80%) in advance. The rest is held back until successful completion of the project and production of all required reports and outcomes. Quite often applied for small/medium-sized grants. This enables the donor to have some control over quality, timing and completion of the project.
Payment in arrears based on proof of expenditure	Usually for very short-term consultancy work.
Staged advance	You receive an advance at the start followed by advance payments in stages based on achieving agreed targets for the preceding period. Sometimes also with a final payment on completion. This is normal for medium-sized and large grants. This enables donors to monitor the project and ensures that you achieve the targets.
Payment with bank guarantee	Your bank is required to sign a commitment that you will repay all or part of the money advanced to you by the donor if the project is not implemented properly. Sometimes used for medium or large projects. A bank guarantee can be expensive (you have to pay bank charges) and the bank will only issue it if it knows you have the capability to repay if things go wrong. This means either you need adequate capital reserves in the bank or else you may need to place a guaranteed deposit which you cannot spend while the project lasts, so effectively, the whole project is paid in arrears.

What it means for you

Usually the best option for you as it gives you flexibility and no cash flow problems.

This means that you have to 'lend' the project the final payment or delay paying until you get the final payment. This can cause problems if you do not have another source of cash.

This can be difficult to manage unless you have other cash resources to cover project costs before receiving payment.

If you have not predicted your cash flow properly or if you find you cannot implement the project you have planned, you can end up with serious cash flow problems here.

It is best for small organisations to avoid this unless you have a lot of money in the bank. In any case, if this is so, your bank manager may not give you any option!

If the money comes late

Donors can sometimes be very slow in making payments. Projects that have not been paid on time have lost team member support, let down project partners and beneficiaries, missed important deadlines, missed the entire fieldwork season and even gone bankrupt. Below are some ways to help avoid this.

- Make sure you understand payment schedules in advance – try to negotiate the best possible schedule for you.
- Plan your cash flow and project carefully – try not to schedule expensive commitments that cannot be moved at the start of payment periods.
- Make sure that you always meet all donor requirements (especially reports) carefully and on time – even an accidentally unsigned form can delay payment for weeks.
- Build a good relationship with your donor and keep them updated on a regular basis – if you have a problem, they are more likely to help if they know you well.
- Build a good relationship with your project team and partners – they are more likely to be patient if payments are delayed.
- Try to maintain a cash buffer – establish a contingency fund to cover essential costs if payment is delayed.

5.1.2 Banking

You may wish to set up a special bank account for your grant and some donors require this. Some banks require a lot of paperwork to establish an account in the name of an organisation and you should allow plenty of time for this. It may be tempting to use a personal account of a team member but, unless there is absolutely no other option, don't! At minimum, all funds must be kept separate from any personal money. However, this is a risky approach for the project and for the individual and is best avoided.

It is also worth asking your bank a few other things:

- What are the charges? Some banks can charge a lot for transactions, particularly international money transfers.
- Where are the branches of the bank? Make sure that you will be able to access your account from different towns if your

project has a need for this.

- What exchange rates will they use? If the grant is paid in a foreign currency, it will be converted to the local currency when your bank receives it (unless you set up a special foreign currency account). You should make sure you get the best possible exchange rates. In countries where exchange rates are very unstable, you may want to open a foreign currency account and only exchange money into local currency as you need it and when the rate favours you.
- Can you open a deposit account? If you receive an advance payment you can earn interest on it if you keep it on deposit. Ask your bank to arrange a chequing (current) account for day-to-day use and to keep the bulk of the money on interest earning deposit. Remember you must show interest earned in your books. Some donors will insist that this interest is declared to them and, if you fail to do so, will even debit an estimate of it from the total value of your grant – so make sure you track it carefully!

Setting up a book-keeping system

If you already have a financial management system, then book-keeping should be straightforward. It will probably just involve setting up new headings to track the project expenditure in your financial records. These will enable you to work out how income and expenditure should be reported and recorded.

If you do not have an existing financial management system, you must set one up without fail. If you do not do so you will end up in a mess very quickly and this will cause problems with your donors, your partners and will probably end up with some people losing money.

The basic rule of book-keeping is simple: make sure you keep a written record and evidence of every single financial transaction that takes place.

If you have a good financial management system set up then you should be able to track transactions easily. If you are setting one up, it is almost always worth getting an accountant to help at the start to check that you are getting it right. A simple system would be as follows:

Bank-book
Keep a bank-book to list all transactions into and out of your bank account. Ensuring that this is kept safe is as important as making sure that you keep your field notes safe. Also obtain a numbered written confirmation of each transaction (paying-in voucher, withdrawal voucher, cheque or money order counterfoil) and file these carefully in a bank transactions file. Also make sure that your bank notifies you when the money arrives and that you also complete any paperwork confirming receipt to the donor.

Each month ask your bank to send you a bank statement showing all transactions on your account. On a monthly basis, check that your bank-book agrees with your bank statement. If it does not, try to find out why. It may just be that the bank has deducted some charges from your account or that a cheque you have given someone has not yet been presented or cleared by your bank. List these items in your bank-book and then get someone else to check it. You can both sign it. You can now be sure that your bank account is in order.

Cash-book
You will also be using cash for all sorts of purchases and dealing with cash can often cause some of the biggest headaches. You need therefore to set up a cash-book to record all cash transactions.

- Record in your cash-book every time you receive cash (most likely in the form of a cash withdrawal from your bank account) and every time you pay it out.
- Obtain written confirmation of all cash transactions (receipts from shopping, withdrawal slips from your bank or signed receipts for cash payments to individuals or organisations) and keep these in number order in a cash transactions file.

- Do not give anyone cash without getting them to sign for it. If you advance some cash to someone to make purchases make sure that they sign for it and understand that they are accountable for that money and must give you full receipts for expenditure plus any change.
- Find a secure place to keep your cash and accounts books. Make sure that only a limited number of named people have access to your cash box and books.
- On a regular basis check your cash-book against the cash you actually have. If the two do not agree you need to find out why. You have your cash transactions file to use as a double check. Once you are happy that you have accounted for all discrepancies, sign off your cash-book as you do for your bank-book.
- Many projects make much greater use of cash than cheques and it may be worth reconciling your cash-book weekly as it reduces the amount of work each time and will allow you to spot more quickly if anything goes wrong.

Computerised financial management

It is perfectly possible to do all the above on a paper system. However, there are also many computer packages available that will keep help you track of your finances and provide bank, cash-book and budget reports automatically. You can also set up simple cash and bank-books in such an electronic spreadsheet and so avoid the need for large ledgers. However, if you want to do it on a computer, do bear in mind the time you may have to invest in setting up and learning such a system, make sure it cannot be tampered with by unauthorised people and remember also that you must back up any computer data without fail. If things do go wrong your files of bank and cash transactions and bank statements should allow you to recover everything but it will involve a lot of work.

5.1.3 Procurement and asset management

It may be that your donor, your partners or your organisation (if you are in one) has certain rules about how you spend the money. Procurement rules are designed to make sure that money is spent honestly and fairly and that you are getting the best deal on goods and services you buy. Here are just two examples of the kind of procurement rules you may come across:

- **For goods:** for any purchase over $1,000 specifications must be drawn up, three quotations must be obtained based on the specifications and the lowest cost quotation must be chosen.

- **For services:** local staff posts must be advertised in a suitable newspaper and CVs examined by the donor before appointment.

You must make sure that you understand and follow procurement rules of your donor and that you keep clear records of the procurement process. In the spirit of fairness, transparency and value for money, you may wish to set up simple procurement rules for your own project.

Inventory and small assets

You should also keep good records of the assets of the project; the things it owns which have some value, for example fieldwork equipment or textbooks. There are many good reasons for this.

- You may have to prove to an auditor that they really exist.
- You may want to check you still have them from time to time.
- Your donor may have stipulated what is to happen to them at the end of the project and may want you to prove this. For example for international projects it is common for assets to be handed over to the local counterpart at the end.
- You may need records for an insurance claim if assets are damaged or go missing.

It is a simple task to set up a list of assets with dates of purchase and serial numbers where relevant and to keep a file of guarantees, instructions and other documentation.

5.1.4 When the money is spent – audit and reporting

The job of an auditor is to verify independently that your books are a true record of what has actually happened and that you have fulfilled any legal, accountancy or other obligations concerning your finances. Some donors require that your project is audited (do not forget to put audit costs in your budget) but it is, in any case, simply good management practice. Companies and charities are normally required to be audited annually.

Audit will involve inspection of your accounts and records and can take from a few hours to a few days depending on the size and complexity of your project. If you have kept good and clear financial records, then audit should present you with no difficulties, but it is worth making sure that your auditor understands your project in advance so that they can help if there is a problem.

Financial reporting to donors

It is likely that your project budget, as proposed to the donor, is constructed under a number of headings such as 'Salaries', 'Travel' or 'Equipment'. Your donor may wish you to prove that you have spent the money on what you said you would and this may be something the auditor will also want to check. It is therefore useful to record in your bank and cashbooks the budget heading for each transaction. This will mean that you can easily track expenditure against your budgets and report to donors how the money has been spent. If you have a computerised system, you can set it up to do this for you.

Changing budgets

Most donors understand that budgets do not always turn out as planned and that you need some flexibility. Some will even allow

you to move up to a fixed percentage from one budget heading to another without prior permission, but make sure you clearly understand the limits on this.

If you find that your real needs do not fit the budget, then talk to your donor.

Provided that you can justify any changes and that your project is achieving its objectives then this should not be a problem, but you should not assume that. Remember that your donors have their own auditors to keep happy too so try to help them to help you. Being completely honest and open with your donors throughout the project will make life easier for everyone.

Final financial report
Your donor may well require a final report on how their money was spent and what has happened to any surplus or to any assets. If you have kept good records throughout, then this should not be a problem.

5.1.5 Physical resources and services

As shown in the previous section there may some constraints on how you buy things for your project through procurement rules and your initial budget. There are also a number of other things to think about when shopping for goods and services.

Getting value for money
You can often save a lot of money just by asking for discounts and bargaining. This can be quite important, even for well-funded projects. Indeed big spending projects in otherwise poor areas can sometimes actually cause local price inflation. This may be good for local traders but for other projects that follow with much tighter budgets, it can cause real problems. Conservation money is hard to come by so we should spend it carefully.

Below are some ways of getting value for money:

- **Ask for a discount**

It is often possible to get a much better price for things with a bit of planning and common sense. Many suppliers, from hotels to photocopying services, will offer you substantial discounts if they think you will use them again. You should always ask for a discount.

- **Get a range of quotations**

Tell suppliers that you have to get quotations and that they will not be chosen if they do not offer a very competitive price.

- **Ask for donation or loan of equipment**

For short-term projects, you can sometimes borrow equipment. Some projects have had luck in borrowing a vehicle from a dealer for a few months. Sometimes you can get equipment donated. Offices that are upgrading their computer systems can occasionally be persuaded to give away their old PCs. Do remember though that procurement rules for some donors require purchase of new equipment and may not be happy with second hand. Also, make sure any such donations are properly valued and added to your asset list, just as you would if they had been purchased.

Purchase and import taxes – when to pay and when not to

Most countries charge some sort of purchase tax on goods that you buy. Many also charge tax on services provided. Projects must be careful to try not to pay tax unnecessarily but also to keep within the law. Every country is different but the following guidance may be useful:

- **Sales tax: can you avoid it?**

Normally this is included in the purchase price and you pay it automatically. However, sometimes you can then reclaim it. In some countries, for example, NGOs or government projects enjoy sales tax exemption. It is worth checking to see if this is the case and

obtaining the necessary documentation. You may then be able to shop in government shops or to reclaim tax paid.

If you pay sales tax for things you buy and take to another country you can sometimes also reclaim the tax. This may be important if your project is, for example, shopping in Europe where you can reclaim Value Added Tax if you take the items out of the European Union. You will need to check local regulations for this.

- **Import tax: can you avoid it?**

Most countries have a limit on the value of goods you can bring in tax-free. Above the limit, you may have to pay tax. Of course, if you have saved the tax in the country of purchase, then you cannot complain too much but there are some things you can do. For some countries, you can get import tax exemption for items that are gifts to projects or government agencies. In addition, if you can assure customs that the equipment is solely for your own use and you will take it away again when you leave, you are unlikely to be taxed.

- **Shipping equipment**

Shipped equipment arriving unaccompanied can take months to extract from customs warehouses with an endless requirement for paperwork and payments. If you are shipping gear, do make sure that your shipping agent is able to process paperwork and deal with all tax issues swiftly on arrival.

- **It is very important to keep good records of things you buy, including serial numbers and tax receipts. You may be asked to show these to customs officers.**
- **A really knowledgeable and well-connected local project partner or adviser should be able to help steer you through this whole area.**
- **It is inadvisable to 'take chances' with tax and duty issues as the penalties can often be quite severe.**

5.1.6 Setting up a project office or base

You may well need to set up a base for your project. Remember that this may have to be quite a versatile space with room for storage, perhaps with vehicle parking. It is going to be a place where varying numbers of the project team and their collaborators will be passing through, working, visiting or preparing to go into the field and there are a number of options and important considerations here:

Borrowing office space

For short-term projects, a local NGO or business may be able to offer you office space free or for a small contribution. In addition, government counterparts can sometimes find office space in their buildings. This is a cheap and easy option but, as guests, you need to consider the impact of your activities on your hosts and make sure they are not going to be absorbing any unreasonable costs on our behalf (especially if in offering this, they have not clearly understood your needs in advance!).

Renting office space or a base

Outside major cities, rents can be good value, particularly if you are able to pay for a reasonable period in advance. In cities, however, it can be very expensive, so if that is where you need to be, make sure you have budgeted realistically for it. Sometimes you can rent a house that can be used for office and accommodation, saving money on hotel and housing costs. You should, however, consider a number of factors including the following.

- Who is responsible for maintenance and repairs – you or the owner?
- What are the charges for supply of services such as water and electricity, and are these services dependable?
- Is there a good reliable telephone line? It can take months to get one fitted and be very expensive. If you want to use email, check to see if the line can deal with it.
- Do you need any kind of registration or permit to use the house for office or accommodation? In some countries there are regulations governing the use of buildings.

- Can the building be made secure? You will have a lot of equipment and it needs to be safe. Sometimes the rental can include the cost of a security guard.

Equipping the office or base

It is easy to underestimate what it will cost to set up and run the office. Do make sure that you budget for this properly or you will find office costs eating unexpectedly into your budget. Here is a list of a few things people often forget.

- Make sure you have an independent power supply and surge protection for computer – power surges can destroy computers and modems. Consider this to be part of the cost of computer purchase.
- Check telephone costs – adding new lines and extensions can cost a lot and telephone charges can be extremely high.
- Do you need air conditioning/dehumidification? In some countries, this may not be a luxury just for comfort. A lot of sensitive equipment (including computers), biological specimens, slides, and books and papers can be damaged or even destroyed by high humidity. You may want to set up one room with a reasonable climate to accommodate these.
- Do you have a secure place? It is good to invest in a lock-up for valuable equipment and a safe if you are going to keep cash.
- Staff costs – in some tropical countries, houses come with a guard/gardener/handyman and sometimes his family. You should pay for them, and will need to budget for this.

Be a good neighbour: it is worth getting to know your neighbours when you move in and to explain who you are and what you are doing. In some places neighbours are invited to a traditional 'house blessing' ceremony and this is a good way to get to know them.

5.2 Human resources

5.2.1 Who will do the work?

A project plan may show clearly what needs to be done, but it is also important to think about who is going to do it. The project may be implemented by a wide range of people including your own staff, counterparts, consultants, volunteers or subcontractors.

Your own staff

Although much of the project work will be done by the staff of the proposing organisation or team, this should not be assumed. Indeed, it is unlikely that a small organisation or team will have all of the skills necessary to implement a complex project. You can deal with this in two main ways.

- You can train your own team do the work necessary. This will require investment but many donors are keen on staff development and capacity building. However, remember that it will take time for the team to become proficient even after training and for short-term projects this may not be practical.
- You can recruit new members perhaps just for the duration of the project. This can be a good solution if the right people are available but recruiting can take time as well.

The participation of local people within the project team

Many projects increasingly include local people from the host country or region within their project teams. Indeed, it is common for particular specialists amongst the team members from overseas to be shadowed in the work by local staff from the host country who have comparable roles. Such local team members are often called counterparts and it is increasingly common, in international projects, for the host countries to insist that all such international project teams have local counterparts. This makes great sense as it can help ensure that skills, know-how and experience are shared well between the local and visiting team members. It can also be an extremely effective way of building strong local support, understanding and local ownership of the achievements of the

project and thus significantly increase the chances of it having real long-term impact. Equally, it can also ensure that the visiting team members gain a much deeper understanding of local issues relevant to the project and the context within which the project is attempting to operate.

Participation by local nationals in international (visiting) teams

Potential advantages

Local people can be important contributors to project teams because they:

- can provide a lot of local knowledge and know-how that team members from outside do not have
- are likely to understand how things get done locally and what are the problems
- are likely to have valuable local linguistic and cultural knowledge
- may have considerable expertise from which the project can benefit
- know details of local prices, services and resources available in the local area
- often possess some very up-to-date and useful information about conservation issues in the area
- will remain in the project area long after the external project team members have left, and thus help secure the long-lasting impact and benefits of the project.

Figure 17: Participation by local nationals in international (visiting) teams – Potential difficulties and their solutions

Potential Difficulties	Solutions
Sometimes local people are assigned by their superiors to join visiting project teams rather than being able to join them out of choice or suitability. This can potentially cause difficulties for all concerned.	This can be turned to advantage only if the training benefits are maximised and the team dynamics are carefully managed.
The assigned staff may not have any real understanding of what the project is all about and lack commitment to it.	Skill and knowledge transfer benefits can be even greater in such circumstances, providing that the other team members seek to stimulate interest levels and engage this.
The assigned staff may have little previous experience of the work the project will do.	They may be able gain much very valuable experience through the project if well motivated by the rest of the team.
Local staff may (at least initially) be poorly equipped for field work.	They may benefit significantly in this respect both during the project and afterwards, providing that capital assets of the project are donated to local institutions able to make best use of them. This is an increasingly common requirement from funders.
Local team staff may be comparatively poorly paid and trained and can be suspicious or even resentful of what the visiting team members are doing.	This sort of situation requires very careful handling, but both visitors and locals can often learn a great deal about one another's cultures, if relationships based on trust and mutual respect can be engendered.

Some key things for visiting teams to remember about working with local people

- Local people are likely to be strongly interested in projects in their local area and can often make a vital contribution to project teams.
- In order to maximise the project benefits from the participation of local people in project teams, it is important to make sure that the skills and knowledge they possess are recognised and well utilised.
- All involved should try to make sure that both visiting and local members of the project team are able to take part in all the project activities.
- Make sure that the opportunities for two-way flow of knowledge and experience and mutual support are optimised.

Consultants

You may wish to provide some short-term specialist input into your project either for training or for technical work. Short-term consultancy can be expensive, but if well managed it can help a lot.

Consultants can:	**However they also:**
• provide specialist support in important areas and offer new perspectives • train, inspire and motivate staff • help you to deal with difficult areas of work and give you the benefit of their experience • be a long-term friend to the project even after they have finished the contract.	• can cost a lot of money • may not be as committed to the project as you are • may expect to be given special treatment in terms of accommodation, transport etc • may expect everything to be prepared for them to do their work and may be relatively unsympathetic if you are not organised to make best use of their time.

Some important things to remember when hiring consultants

- Make use of personal recommendations from people you know.
- Ask to see CVs and examples of their work.
- Define very clearly what it is you need them to do.
- Make sure that everything is in place for them to do their tasks.
- Send them as much information about your project as possible.
- Make then fully aware of the conditions and constraints of work.
- Define a clear contract and terms of reference well before you start.

Volunteers

Volunteers can be a great help to a project, but working with them is not always completely straightforward.

Volunteers can:	**However they can also:**
• provide a lot of help at low cost • bring a wide range of new skills and knowledge as well as enthusiasm (volunteers are not always young and inexperienced) • provide a good potential source of new paid staff • be a friend to your project and organisation long after finishing their work.	• require a lot of attention and supervision and use up a lot of your time • compete with permanent staff for space and resources in the office • have an attitude to work that is disruptive • cost more than you think. You may have to cover accommodation, transport, subsistence and provide the means for them to do their job (e.g. office equipment, operating budget etc).

Some important things to remember about working with volunteers

- Try to define the job that you need to be done before engaging volunteers. It is best to find a clearly defined task with a defined goal. If you just take on volunteers and then try to find things for them to do you will waste a lot of your time and theirs.
- Try to select volunteers with the skills you need but also recognise that they may want to develop new skills too as part of their work with you.
- Make a formal written agreement with your volunteers that states what they are going to do for you and what you are going to do for them.
- Remember that volunteers are investing their time into your project and you should invest in them in return. Try to make them as much part of the team as possible and do not make them feel like 'second class citizens'.
- Do make sure that you provide regular supervision and feedback for your volunteers. It can be useful to arrange occasional review sessions or to appoint one of your team as a 'mentor'.

Subcontractors

If you are part of a larger project and there is a defined job that needs to be done, it can sometimes happen that you do not have the skills, resources or time to do it. It can then often make sense to subcontract that task to someone else with these skills.

Examples of subcontracts might be for a building company to construct a ranger station or for a university social science department to carry out a participatory rural appraisal in your study area. Normally a subcontractor will provide the staff, equipment and other needs and you will pay for the whole package. In fact hiring subcontractors gives you a good idea of what your donor has to do when dealing with you!

Subcontractors can:	However, they can also:
• do work that you cannot do or do not have time to do • produce professional results quickly • save you from having to invest in specialist equipment and training • provide additional experience for your team especially if you appoint a counterpart from your team to work with them.	• require clear contracts and terms of reference • require supervision and monitoring of the work they do- this takes up your time • run over time and over budget and therefore give you problems with your donor and partners • do a bad or incomplete job, leaving you not only to try to deal with the problem, but also to find another subcontractor to do the job properly.

Some important things to remember about working with subcontractors

- Define clearly the job you need to be done and write detailed terms of reference, specifications, required outputs and timetable.
- Procurement regulations may require you to advertise the subcontract and select from a range of competing bids.
- Do not simply select the first organisation you come across – again personal recommendation can be very important.
- Always ask to see examples of work they have already done and if possible for the contact details of a recent client whom you can ask about their work.
- You should ask subcontractors to produce a proposal showing how they will do the work, the skills and qualifications of their team and a price for the job.
- Once you have appointed a subcontractor, then you should go over their work plan in detail making sure you and they are happy with how it will be done.

- Make sure you have a contract.
- Make sure you supervise the contract.

5.2.2 Recruitment and advertising

Before you recruit new consultants or contractors, you should always write some clear terms of reference for the job. These should include the main tasks to be done, the duration of the post/contract, essential skills and qualifications, the likely salary range and other benefits for the post.

Recruitment can happen in a number of ways.

- **Internal recruitment:** there may be just the right person in your team already. Make sure that you give people in your organisation the chance to apply.
- **Headhunting:** you or one of your team may already have just the right person in mind. This can be a very quick and easy way to recruit but beware of being 'pushed' into selecting someone you know. You can tell people who might be suitable about the job and invite them to apply. However, sometimes you can spend too much time thinking about who you want and not enough about what you want done. It is often best to define the job and then find the person, or you can end up changing the job to fit the person you had in mind.
- **Formal recruitment through advertising:** this is likely to be the fairest and best way to find the most suitable applicant but it takes time and it can be expensive to advertise and then invite short-listed candidates for interview. Your donor and procurement rules or recruitment rules of your own organisation may insist that you recruit in this way.

Whichever way you choose you should try to be as fair and transparent as possible in the recruitment process. Some sort of formal evaluation of the suitability of the candidates is normally a good idea. A formal interview with a small panel is a common way to do this and some interview processes also require candidates to demonstrate their suitability for the job or contract by undertaking a practical exercise or role-play.

Some tips on recruitment of team members or contractors:

- Before interviews write up a list of your requirements and match all applicants against them in a table based on information from application forms.
- Ask for real evidence of their skills and qualifications such as examples of previous work.
- Ask for details of referees who can tell you more about the background of applicants.
- Draw up a list of strengths and weaknesses of applicants. Use these as a basis for interviews or other formal selection procedures.
- Normally you should find the person to fit the job and not the job to fit the person.
- Remember that the person you appoint needs to fit in with your team as well.

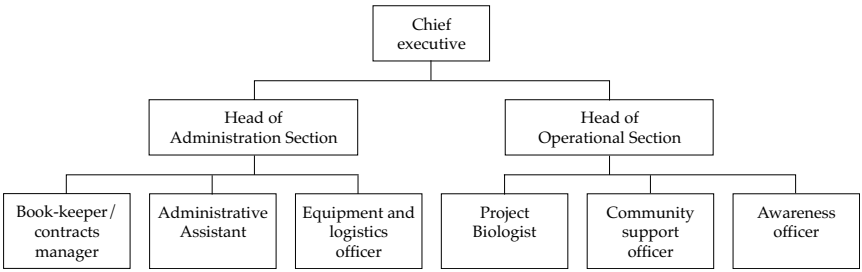
5.2.3 Defining team roles and responsibilities

Whatever the composition of your team, it is a good idea to make sure that everyone knows clearly what their and everyone else's roles and responsibilities are in your project. At the very least, everyone who works for or with you should:

- be aware of the overall nature of the organisation and its overall objectives or mission
- be aware of the goals and objectives of the project to which they are assigned
- have a written job description that outlines their duties and responsibilities
- know the main duties and responsibilities of those they work with
- know to whom they are directly responsible on a day-to-day basis
- know who can help them deal with problems both related to their duties and responsibilities and to work – and non work-related personal matters.

Many organisations and project plans include some kind of 'organogram' showing graphically how the staffing is organised. For example:

Figure 18: Organogram of a typically structured organisation



Organograms can be a very useful way to show the structure of your project team, but they do suggest a rigid hierarchical structure, which may not always show accurately how project teams actually work. The structure does illustrate, however, who is responsible to whom in terms of working to achieve the project objectives. If everyone knows their own and everyone else's roles and responsibilities and if you have effective means of communication, then the team has a better chance to work together to achieve project objectives.

5.2.4 People, money and resources

It is basic good practice in larger-scale projects to ensure that all people who work for you as staff, consultants, contractors and even volunteers have some kind of employment agreement (contract) and terms of reference (job description). This helps them and you and in many countries is a legal obligation on the part of the employer.

NGOs sometimes do not pay as much attention as they should to contracts, since they often work on the basis of mutual trust and

respect. This is fine for much of the time, however, if a dispute does arise, it is then that you quickly realise that it is much better for all concerned if there is a contract. This is even more important if you are hiring a consultant or contractor to work for you. You must make sure that they really do deliver what they have agreed to and that the contract is watertight. A half-built visitor centre or a poor quality consultancy report are not much use to you.

Contract

A contract is likely to contain some or all of the following information

- name of contracting organisation
- name of contractee
- job/contract title and purpose
- date of commencement and duration of contract (may include trial period). For consultants and contractors this may include a timetable for completion of the job
- description of general responsibilities of employee/contractee (detailed job description may be appended as 'Terms of Reference')
- management structure and line manager/team co-workers
- place of work
- work hours
- salary/fee, timing, and method of payment. For consultants and contractors staged payments based on results may be appropriate
- additional benefits (holiday, sick pay, insurance, pension, etc)
- intellectual property and restraint clauses
- conditions of termination by either party
- means for dealing with disputes and disciplinary matters
- means for changing the contract
- signature of both parties. Normally two copies are signed, one for each signatory to keep

This is a very general contract structure. It is important to remember that contract and employment law differs from country to country and you should get your contracts checked by a local expert.

You will probably find that other NGOs where you are working will have already done this and it is well worth asking around to see if you can borrow someone else's basic contract structure and modify it for your local needs.

Terms of reference
These describe the full details and specifications of the job/contract/consultancy and are normally appended to the contract.

Terms of reference will normally include some or all of the following:

- job title
- management structure
- expected duties
- expected outputs and deadlines.

Negotiating the contract
Once you have decided whom to hire you should give them some time to review the proposed contract and terms of reference and make a time to answer any questions, clarify anything that needs further explanation and negotiate details.

Personnel file
You should keep, in a secure place, a file containing details of staff members, consultants and contractees. This should include original contract copies, CVs and personal details, insurance information, copies of passports/identity cards and other important documents.

What to pay people
This can be very tricky, but in the end, a number of factors will decide the rate of payment.

1 What you can afford: you should have an idea before you start recruiting about the upper limit of what you can pay.
2 What is acceptable within the wage structure of your organisation (if you have one): you can establish and publish a wage/fee structure for your organisation and appoint people at a certain scale. This is very transparent and

everyone knows where he or she stands. You could also arrange wages/fees by individual negotiation.

3 The expectations of the applicant: It is common practice to ask applicants at interview or even in their application letters what they are earning in their current job and what their salary expectations are.
4 The current market rate for the job: it can be a good idea to talk to other organisations to get a feel for what is the going rate for the job you want.
5 The lowest or best offer: for contractors you would normally get three or more contractors to tender (bid) for the work, providing a price for supplying the goods and services you have specified. You would then choose the best bid based on price, on the technical quality of the bids and on the reputation and track record of the bidders.

When you are deciding what to pay, you should also remember that **paying too little** may mean that:

- staff may leave for better-paid jobs
- motivation may be low leading to poor quality work
- staff may look for other ways to supplement their income.

paying too much may mean that:

- it stretches budgets and adds to overhead costs
- it adds to cost inflation generally. In many cases, wage inflation caused by well-funded projects affects all other projects in the same field of work
- it can cause resentment among lower paid staff (it is hard to keep people's salaries a secret even if you think that is a good idea).

Don't forget on-costs (other employment costs and overheads)
Employing someone will cost more than their salary – there are many other costs involved.

- **National/social insurance/pension contributions.** Many countries have some kind of social insurance scheme, which involves either compulsory or voluntary contributions. In some cases, employees will expect you to make these payments

on top of their salary. You should find out what scheme operates in the country you work in and make it very clear to employees what contributions you will make and what you expect them to make. Some organisations also have contributory pension schemes where the employer is required to make top-up payments to the employees' pension funds.

- **Tax.** You must find out what the situation is with income and employment taxes. Are you expected to deduct tax from employees yourself or is it up to them? Do you have any other tax obligations as an employer?
- **The Thirteenth Month.** In many places, it is usual to pay an additional month's salary to staff at the end of the year or, in Islamic societies, to coincide with Ramadan. You should find out if this applies where you are and plan your budgets accordingly.
- **Health/accident insurance.** Some staff will expect you to cover medical and accident insurance for them as well. Some employers pay an allowance for staff to cover this themselves, but this can lead to staff forgetting or saving the money and therefore being uninsured. If an accident occurs it is likely that you may still have to pick up the bill, so it is recommended that you make insurance arrangements for your whole team. A blanket policy for all employees can work out cheapest.
- **Relocation.** If a newly recruited team member has to move to do the job they may expect you to cover the costs of moving and that can be expensive, even more so if they have a family. Make sure that you budget for, negotiate and agree this.
- **Accommodation allowances.** If staff are expected to relocate, in addition to their relocation costs, they may also expect an allowance for housing as well.
- **Work expenses.** It is easy to think that once you have agreed all the employment costs, that you have covered all the expenses of your new staff member, but often people forget the additional overheads associated with employing people and enabling them to actually do the job. Will you have to provide them with a desk, a computer, a telephone, a set of field equipment, a vehicle and consumables like paper, pens, and so on? There will also be the costs of the office buildings (the more

staff you have, the bigger the space you will need to rent), plus heating, lighting, office cleaning, etc. Do make sure that, for each additional team member, you recognise and budget for these additional overhead costs of enabling your new team member to do his/her job well. Where separate bills per employee cannot be identified (usually only truly possible where an office has only one person in it!), you will need to estimate these additional overheads. This is normally done as a percentage (usually between 10% and 50% depending on the local circumstances and real costs) of the total employment costs (Salary + Employers' contributions to Social/Health insurance + Employers' pension contribution).

5.2.5 Other employment expenses

Travel, subsistence and per diems

Many conservation projects involve a lot of work away from the office, either in the field or working with partners and counterparts. Keeping track of the costs of this can be difficult and there are a number of ways of doing it and various issues that you will need to keep in mind.

- **Make a budget:** you should have a proper budget for away-from-the-office work and trips. It is worth sitting down together with the team to work it out so that everyone understands. On a typical trip, there will be transport costs, food, accommodation, costs of consumables such as batteries and other small miscellaneous expenses from tips to taxis.
- **Avoid cash:** it is a good idea to avoid paying by cash if you can and to try to cover as many of the trip costs through pre-purchase or through having accounts with suppliers.
- **Claiming of expenses in arrears:** team members pay for things out of their own pockets and are reimbursed at the end of the trip for receipts they have kept. This is not a very popular way of doing things as it presumes upon the staff to spend their own money and then possibly lose it if they do not keep receipts.
- **Paying cash advances:** the obvious solution is to give team

members cash in advance (which of course they sign for) and then to ask them to collect receipts for all expenses and to settle accounts at the end of the trip. This can work well but those taking out cash advances have to understand that they are personally responsible for the money and must make up any shortfalls themselves.

- **Paying per diems** (NB per diem is the Latin for 'daily' but is used here as a noun): per diems are a fixed daily sum paid to and signed for by individuals to cover a range of personal expenses. Paying per diems avoids the need to collect dozens of receipts for minor expenses such as meals, taxis and other miscellaneous costs. Per diems simplify accounting, make staff responsible for their own day-to-day expenses and remove a lot of potential for financial problems. The important thing is to decide and make it absolutely clear what the per diem covers and what it does not cover, that is to decide what costs should come out of the per diem and what are reimbursable on production of a receipt. Unfortunately, the issue of per diems can cause huge problems and can be one of the most time consuming and contentious parts of project management. In many places, the per diem is seen as a bonus or compensation payment for being away or even for just attending an event, and it has essentially become a hidden subsidy to salaries. All too often recipients of per diem try to avoid spending any of the money, do not think that they should spend any of it and view it as a legitimate perk. In some places, people are reluctant to turn up to workshops, training events and even basic meetings without a per diem being paid, even if all of the expenses are covered. The issue is made more complex in places where government staff have very low basic salaries and see per diems as a way to help them get a living wage and to share the benefits of externally funded projects. In some countries, there are even official standard sums to be paid directly to government staff for attending events such as workshops.

The best solution is for your project to have a very clear and transparent policy on per diems and make sure everyone understands it.

- Within your project, produce a written per diem policy and scale of payment. In the end, it is better to pay staff a good wage than to encourage them to try to make money out of per diems.
- Work out the real average costs of being away (some organisations have a rate for field work and a higher rate for town/city visits) and pay those as a per diem, but make clear that if there are legitimate unforeseen expenses they will be reimbursed.
- For partners and counterparts try to find out if there are any statutory rates payable. In some countries NGOs and other organisations have clubbed together to develop a standard per diem rate.
- Always agree per diem rates in advance of any activity. In other countries staff working with you as part of their normal work duties would never expect a per diem. It all depends on where you are and what precedents have been established.

The most important things to remember are:

- try to avoid the need for per diems by covering as many as possible of the costs directly
- if they have to be paid, agree per diem rates in advance, preferably in writing
- make it very clear what people are expected to pay for with their per diems
- make sure people sign for receipt of per diems
- try to avoid per diem inflation, as it will increase both your costs and the costs for the next project.

5.3 Health and safety

There is no particular reason why a conservation project should be any more risky than daily life. However, the risks may be less familiar if the environment, the region or your activities are different from those of normal life. Project organisers have a responsibility, to everyone involved, participants and supporters, to give adequate attention to health and safety. While the strongest motivation is moral, there may also be legal implications if things go wrong.

Placing anyone in a position of serious risk of accident, injury or worse should be regarded as totally unacceptable on a conservation project. Bad luck can happen but, in most cases, the risks of it happening can be minimised. It should not be acceptable that hindsight reveals things that could and should have been foreseen and avoided.

Risk is the product of hazard and impact

Hazards are the things that can go wrong. They have different likelihoods of doing so. Impacts are the consequences if the hazard does occur. These can vary from minor to disastrous. We all accept some risk, for instance by driving a car, but the aim of a health and safety approach is to contain risks within acceptable limits. In general, we tend to accept higher impacts from less likely hazards but take steps to avoid or minimise the impact of those that are much more likely to occur. For example, Being involved in a plane crash is likely to be disastrous but is very unlikely to occur. Most people still fly. Being involved in a car crash is hugely more likely. Most people do not drink alcohol and drive in order to cut the likelihood of a crash. They wear a seat belt to reduce the likely impact if they do have a crash.

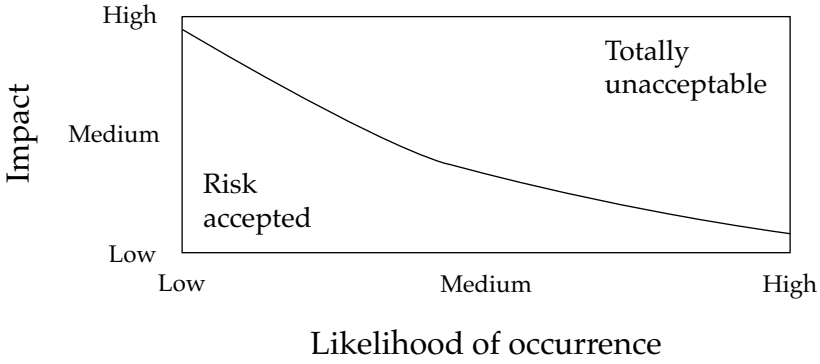
5.3.1 Risk assessment

Brainstorm the likely risks, their likelihood of occurrence and their impact. If there is a range of possibilities, impact should point out the bad case scenario. The list does not need to be particularly detailed, but it should focus on those things that could be unacceptable if ignored. A selective example might look like this:

Hazard	**Likelihood**	**Impact**
Infectious diseases	Moderate	High
Diving accident	Moderate	Could be disastrous
Road accident	Moderate	Could be disastrous
Minor injury	Moderate	Moderate to high
Stomach upset	High	Medium to high
Rape	Low	Catastrophic
Kidnap	Low	High
Snake bite	Low	High
Violent robbery	Moderate in town	Medium to high
Heat stroke	Medium	Medium

5.3.2 Risk management

Figure 19: Thinking about likelihood and impact of hazards



It is clear that there are two ways to move an identified risk into the acceptable zone. You can cut the likelihood of the hazard occurring, or you can cut the adverse impact if you are unlucky and it does occur.

Risk management has six steps:
1 Identify the hazards
2 Assess their likelihood of occurrence
3 Assess their impact if they did occur
4 Reduce their likelihood of occurrence
5 Reduce their impact if they do occur
6 Fully share the process and the results.

5.3.3 Reducing the likelihood of hazards

The key to hazard reduction is adequate awareness.

This might come from basic information or more formal training. No-one would sensibly be unaware of the diseases prevalent in the study area and their modes of transmission (tick bites, fly bites, infection in water, infection from poor water or salad crops, etc); instead, information would be obtained from consultation with a doctor about specific travel plans. General security information can be obtained from diplomatic missions or from people very familiar with the locality. One needs to know where might be dangerous; a particular road, region or area of town for instance.

Some useful websites that you should check before you go are:
http://www.lonelyplanet.com
http://www.fco.gov.uk
http://www.who.int/

Some outdoor activities are inherently more hazardous and you would expect participants to be adequately trained and experienced. Rock climbing, diving or catching snakes might be examples. Are there enough trained people in the group and is the training at an appropriate level for the severity of the circumstances? In some cases, you might entrust your lives to someone whose experience you do not know such as a local boatman. Try to ensure that you get adequate (and independent) assessment of their competence.

Awareness itself will naturally lead to more caution. In some cases, it might be appropriate to elaborate and write down the precautions you will insist on. This might seem bureaucratic and some could argue that it is up to individuals to take appropriate precautions. However, the integrity and effectiveness of the whole group and the project could be derailed from a small starting point. It could be quite appropriate to have simple rules to restrict behaviour that runs an unacceptable risk of compromising the whole project. Brainstorm or discuss the precautions you will take to minimise hazard and record the results. A simple table might look like this:

Figure 20: Example of a risk assessment

Hazard	Precautions
Infectious diseases	• all members have an understanding of the key risks they are likely to face in the country • all members carry a personal medical kit, with a more comprehensive one held by the group • all members have up-to-date immunisations on the advice of their local doctors • The World Health Organization has put out an encephalitis warning for X province which we will not visit (which is a pity because it has an endemic bird which we had hoped to take time off to go and see) • the bat catchers are aware of the small risk from rabies and have been advised on precautions • we have our own supply of syringes should anyone require an injection in the local clinic where hygiene standards are poor
Stomach upset	Emily is our trained first aider and medical officer. She has appropriate drugs and has issued a simple sheet of precautions which we will all follow.
Minor injury	We have a trained first aider with a simple medical kit. We will only go into the forest in pairs and with survival gear.
Road accident	The road traffic accident rate is appalling. We will never travel by road at night and will only use the ABC Taxi Company which has the best reputation in town.
Diving accident	Claz is a trained PADI instructor. All diving will be under her direct supervision. We are bringing our own gear, which is more expensive than we had budgeted but the stuff for hire locally has a reputation for not being that reliably maintained. The western reef can have a nasty swell for several days after easterly winds and we will only go there with Toby, a very experienced local diver.
Kidnap	The embassy advises that security in the SW province has deteriorated. We have changed our plans and will now work in XY and Z where there is no problem.

5.3.4 Reducing the impact of hazards

Awareness and precautions will greatly cut the chances of something going wrong and in some cases start to deal with it when it does. Nevertheless, things can still go wrong. The second stage of preparedness aims to stop a crisis turning into a disaster. What will you do, for instance, if someone is seriously injured, ill, or kidnapped?

Apart from calm and rational behaviour, you need three things for managing the crisis:

- backup help
- communications
- a way out.

Backup helpers obviously need to know where you are and what you doing and that they might be called upon to help. They will have access to much better communications if, for example, a medical evacuation has to be organised. They might in different circumstances need to deal with the police, embassy staff or media enquiries. For an international project, they might need to contact relatives at home, who themselves might be best placed for dealing with an insurance company or the diplomatic service. Any one individual may not be contactable all the time and it is safer to have a network of several possible contact points that have the necessary information about you and each other.

A **communications route** is obviously needed to make contact with helpers. In a remote area, this might mean walking or driving to the nearest place that has a phone or radio. Do you know where this is? You will need documentation of which your potential helpers are and how they themselves can be contacted so that messages can be passed on. The more people who have these basic details the better.

Finally, you will need **a way to get someone or everyone out** of the project site in a hurry. The route may have several stages but you need a plan of what these are to the nearest point of safety or a

hospital. If finding a vehicle or a boat is difficult, do you have back up plans if you cannot find a key person or their vehicle has broken down? Do you have enough money, or a quick way of getting enough to pay costs for emergency transport or medical attention?

All responsible projects will take out an adequate level of insurance to cover most eventualities, including medical, theft, emergency repatriation and other possible costs. This obviously reduces the risk of a crisis having a further downside from large bills to be paid. Good insurance companies have expertise and capability in areas like organising international medical evacuation.

5.3.5 Implementing the health and safety plan

Merely discussing the issues involved and collating some of the required information will go a long way to ensuring that no unnecessary risks are being taken. It is important to ensure that the discussions and findings are written down, widely shared and understood by all your team members. Though one person will probably be responsible for pulling things together, health and safety have to be a shared issue where everyone has a responsibility and a contribution to make.

It can all look a bit alarming when all the possibilities are thought about and written down. This is no bad thing if people briefly think about what the worst consequence of carelessness can look like and as a result are careful to avoid ever getting into such a situation. There is no inherent reason why anyone should run any greatly elevated risk and no evidence that most people do so in practice. A bit of careful foresight can go a very long way to fend off the 'worst case' scenario.

5.3.6 Operational management of the project

If you have read this far through the book and used it to help ensure that your project plan has also got this far, everything should now look pretty good. You are on location in the field and you have

these assets with you:

- a clear and logical plan which everyone understands and supports
- a time schedule for tasks with milestones for progress
- a set of people capable of executing the tasks and committed to do so
- clear responsibilities for each person matched to the tasks
- other relevant stakeholders on your side
- the money you need for everything
- the equipment and tangible assets you need.

Everything should now be able to proceed without any problems.

It won't, of course. There are a thousand and one things to go wrong even with the best laid plans. Some of the many possibilities include:

- things you had taken as true statements of the situation have in reality turned out differently from your expectation
- the job is harder than anticipated and tasks are behind schedule
- some people are struggling with their tasks
- people issues have caused frictions and tensions
- logistical problems have slowed things down
- bureaucratic obstacles have delayed your plans
- illness has sapped energy.

Nothing is that serious yet. All these things can happen and (as is well-known) most things that can go wrong will. The team needs the flexibility and openness to spot the earliest signs and to be able to deal confidently with contingencies as they arise. Remember that a plan should never be a straitjacket. The challenge is to keep everyone feeling good about themselves, their personal contribution and the overall project.

The team needs the flexibility and openness to deal confidently with contingencies.

5.4. Responsibilities

In any project partnership or team, it is essential to make clear who is responsible for what. In a small group, the management arrangements may be fairly informal and largely based on trust and individual integrity. In larger groups, there are likely to be more formally organised lines of reporting and responsibility. Either system can work well and either can break down badly. The important point is that if some part of the project is going wrong, appropriate people should soon see this and join to think what to do to help. Especially important is that every individual should feel that they have others who will listen, understand them, and look out for them if things are not so good. This might be through a formal structure or it might be through a more informal community of a team, provided it has a caring culture.

Everyone in the team needs the confidence that they will be appreciated and cared for.

5.4.1 Communications

Open communication is the key to achieve the strength that arises from confidence. Such things are much easier to write than they are to achieve. In a large and structured project, there will be formal meetings and reports. Staff might gather for an hour at the beginning of a week to share their recent achievements and speak of their coming plans. Individuals might meet with varying degrees of regularity with their immediate managers.

In a smaller project, everyone might gather at the end of the day and talk about what they have achieved and what problems they have encountered. All such meetings and discussions proceed at two levels. There are the things that are actually said. These are important and can be discussed easily enough. Then there are the things that are not actually said. Often, these are the really important ones! It takes good listening to hear them. Some people

are better at it than others but anyone can learn to do better.

5.4.2 Leadership

The whole subject of leadership and organisational management is one of innumerable books and abundant theory. Much of it is common sense and grows with experience. Some people start with more natural aptitude than others do. These are critically important subject areas not much taught in universities (other than in business courses). We can only recommend that project managers continue to strive for improvement through reading, thinking and practising good management of projects and of people who are their most valuable but volatile ingredient.

5.4.3 Project closure

All too soon, good things come to an end and the fieldwork is over, though not yet the project. If all has gone well, your work will already have achieved real benefit on the ground of course, but that is not the end.

In all walks of life, people like to close business properly and it is important to allocate time to doing this within your project plan.

- It is worth having a debriefing session with all the stakeholders you may be leaving behind. These might include appropriate ceremonial visits and talks with important people and groups. With counterparts and other workers on the project, it is good to allow people individually a time to talk about their experience and how they felt about it. What was good and what less so? What are their future aspirations? Apart from being a courtesy, this is good investment in the future and a good learning experience for yourself.

- On international projects, it is common practice to leave tangible assets in the host country where such things may be hard to acquire. Anything, from field guides, tents, optical equipment or

cooking gear to a vehicle, will be likely to be much more valuable left behind than freighted out. Indeed, leaving equipment is often a condition of large grants. Even if this is not the case, it is a good investment in the future of friends and colleagues who share your interest in conservation. Be careful about the equability of who gets what. Even small items will often be greatly appreciated so it should be possible to thank everyone with an appropriate gift. It is also important to distinguish between those items left behind to benefit the collective on-going impact of the project and those that are given as personal gifts. For large capital items (e.g. vehicles), make sure their future ownership is legally clear and unambiguously documented.

- The Final Report may come a little later (although you will already have been planning it!) but remember to think about the appropriateness of the reports you distribute in the project area. You want to be fair, fulsome and generous in your thanks for everyone who deserves them. Everyone appreciates sincere thanks. Colleagues who work for other organisations, maybe local NGOs or government departments, will hugely appreciate being thanked and acknowledged in reports and especially so if they are seen by their superiors (as they should be; it may be up to you to make sure that they are!).

- Keep in touch after you have left. Remember to honour commitments such as sending photos as well as the more formal reporting. If all goes well, you will want to return maybe for a bigger project, maybe just to revisit friends. Even if you do not return, other conservationists surely will. The reputation you leave behind, for good or bad, will be a contribution to the reputation of the global effort for conservation.

Section 6: Monitoring and evaluation

6.1 Why monitor?

Monitoring and evaluation are not add-ons to a plan, but an essential part of the project cycle. Your first project plan is made up of the information you have managed to gather before you start designing then doing the project. Monitoring and evaluation of your work as it proceeds is crucial to understanding how good your plan was and the extent to which you are achieving your objectives.

Having spent time researching your subject you will have devised a plan from a knowledgeable position. You will have thought through the steps that you need to take and how each stage of the project will link up. However, in the planning stage, you can work only with a set of conclusions that you believe to be true as to how the various factors in your project are causally linked. You can never really be sure how the project is going to work out until you actually start doing it. Monitoring is simply an extension of the logic that went into the planning. The clearer the plan, the easier it is to monitor.

As you start you inevitably pick up new information. Logical connections between various factors are likely to be challenged as a result. If you have a good plan and you understood the problems thoroughly to begin with, things are more likely to happen as you would expect. However, the world is not perfect, and as you gather more information, you begin to realise that what you expected to happen in stage 2 as a result of stage 1 was not actually precise enough, and that you need to do something slightly different. You can find that out only if you monitor what is going on.

Regardless of whether you have been asked to submit regular evaluations to your funding agencies or donors, you need to monitor and evaluate the project yourself, just to see if everything is working as you expected it to. If it isn't, you need to do something about it. You may think that monitoring is not exciting, but it is extremely important to know if your project is really working.

In order to have a well-managed project, monitoring and evaluation needs to be an integral part of the planning process.

At the end of the project, stakeholders will all want to know what has happened and what has been achieved. Reports might take different form for different purpose but all will be based on the same common logic that is in the project plan. Monitoring during the project will have collected some of the key information needed for reporting at the end.

6.1.1 Definition of monitoring, indicators and evaluation

Monitoring and evaluation tend to be used as a single phrase, and in many respects they are closely linked. There is not much point in doing monitoring if you can't evaluate it, and you can't evaluate something unless you have done some monitoring. However, monitoring and evaluation are distinct processes and stages in terms of how to manage a project. It is helpful, especially in the process of project management, to be clear that there is a difference. You also need to decide which factors (indicators) you are going to measure to inform this process. Also when you come to write a report, it is important that you keep these things distinct.

- Monitoring is the process of collecting information to determine the progress of the project.
- Indicators are the factors that are measured during monitoring.
- Evaluation is the adaptive process, which follows monitoring, and asks what are we going to do about our current understanding of progress.

6.2 Indicators

Monitoring is very similar to the scientific method of setting up a hypothesis and working out how to test it. You should know from the plan what you would expect to happen in the project and monitoring is about working out how to measure whether this is happening or not. In order to monitor you use indicators, as described in the logical framework (see section 3). Indicators are things that can be measured which will tell you about progress (or otherwise) of your project. Indicators are not just going to be in numeric terms, but also in qualitative terms. They are things that will tell you that you have changed the situation from what it was in the beginning to where it is now.

In a conservation project, for example, we may be interested in changing the status of a species – putting it in a better conservation state than it was in at the beginning. An indication that it is in a better state is all that we need. We do not always need a detailed comprehensive survey to be able to establish this. In other cases, very detailed research is the only way that you can get the information you need to tell you if your project is working. However, in terms of a conservation project plan, you only need as much monitoring as is necessary to give you the indication that it is working or not working.

It is tempting, especially for research-oriented people, to invest a lot of resources in survey and monitoring. It can be argued that we risk investing more in monitoring the loss of biodiversity than we are investing in tackling the root problems to conserve it. Typically monitoring should not consume more than a tenth of the costs or human resources of a conservation project. On the other hand, projects that have very little monitoring risk failing to spot when aspects are going wrong and thus lose the opportunity for learning on the way.

The scale of monitoring needs to be appropriate and indicators chosen accordingly.

6.2.1 Objectively verifiable indicators (OVIs)

One of the terms used in the logical framework (see section 3) is the objectively verifiable indicator. Objectively verifiable means that, if you were to ask any outsider to comment on what the information collected by the monitoring was telling you, they would all come to roughly the same conclusion based on this evidence. This is because OVIs should not be dependent on someone's knowledge or opinion. They are based on recorded fact. What these facts actually then mean may involve opinion, judgement, or interpretation of the information, but that is where evaluation comes in.

Figure 21 shows examples of Objectively verifiable indicators from a plan to improve the conservation status of a vulnerable bird (Bittern *Botaurus stellaris*) in the UK. The table shows only a selection for illustrative purposes.

While your objectives describe what you would like the project to achieve, indicators say precisely what you mean – they put the clothes on the model.

Indicators are useful to you because they give you a true picture of whether or not your project is working. It is very easy if you are in the middle of a project, when you are committed to working hard and doing well, to think it is going a lot better than it is.

They are also useful to funders because they give outsiders a way of seeing what the project is achieving. Some people fall into the trap of telling funders how well the project is going when in truth it is not achieving many of its objectives at all. Do not try to cover over the problems. If your project is not working as you had originally envisaged, it doesn't necessarily mean you have done something

Figure 21: Indicators and means of verification for selected parts of a log frame for the restoration of a rare breeding bird in the UK

Summary of objectives/cctivities	Objectively Verifiable Indicators (OVIs)	Means/sources of Verification (MOVs)
Overall goal: UK breeding *Botaurus stellaris* population maintained at sustainable level.	• UK population increased to meet UK Biodiversity Action Plan targets Sites designated as Special Protection Areas within 10 years of project commencement	EN reports to the EU/UK BAP Steering Group
Project purpose: UK population increased and established across a wider, more strategic, network of sites.	• Number of nesting *Botaurus stellaris* metapopulations increased from 4 to 13 within 10 years	RSPB/EN and EU LIFE *Botaurus stellaris* monitoring programme
Result 1: Five reedbeds enlarged by a total of 155 ha to make them suitable to sustain breeding, dispersing and wintering *Botaurus stellaris.* (they are named)	• Number of booming *Botaurus stellaris* increased by 12 at 5 sites by t^{10}, 2 by t^{5}	Monitoring of *Botaurus stellaris* ulilisation of sites
Result 2: Seven new reedbeds created to give a total of 274 ha of new reedbed suitable to sustain breeding, dispersing and wintering Botaurus stellaris (seven sites named)	• *Phragmites australis* established and dominant over majority of the newly created areas by the end of the project period t^{4}	Reed establishment monitoring

wrong. Your plan was as good as you could make it at the time you made it, and if you have now come across new information along the way that will force you to change your plan, then that is fine. Remember, the relationship between the project team and the funders needs to be built on trust.

6.2.2 Properties of good indicators

An indicator specifies what you mean by the goal, project purpose and results in terms of things you can actually measure. The more the objectives are SMART, the easier it is to be specific on the indicator. Or viewed the other way round, thinking about the identity of the indicator can help to rationalise the statement of objectives. For guidelines on producing good indicators see section 3.6.3 (page 74).

You may be running six training courses over the next year to train 18 project managers. However, it is not sufficient at the end of the year to think that the project has necessarily succeeded simply because you have run six training courses. Instead, what you need to know is that the 18 participants have been trained as project managers. To be able to verify this will require access to some kind of (ideally external) evaluation. It would not be sufficient for you to say that they had been trained since, having conducted the workshop, you would say that wouldn't you! The real test is – are they now doing better at delivering whatever it was you were trying to train them in? This is the interesting question – has your project had the desired impact?

Indicators are only useful if you can verify them. In larger-scale projects, external evaluators are often brought in by the funding agencies to inspect and assess the project. Indicators that neither you nor they have any way of verifying are of no use to anyone.

Conclusions would then merely come down to personal opinion. This is why there has to be some kind of documentation or report (or other Means of Verification).

If you claim that the number of pairs of parrots have increased from 25 to 72 then you will have to provide evidence, perhaps through your monthly survey results. MoVs are not always just documents however – it is worth remembering that the external evaluator might even want to go and see the 72 parrots for themselves.

When doing the monitoring also make the most of the local environment.

You are looking at the intensification of the use of grasslands and trying to work out whether your project is helping to lower the amount of insecticides in the soil. You could try to measure how much insecticide has gone into the land by chemical analysis but that would be difficult and expensive to do. You could get a good indication by looking at the sales statistics of the local agricultural merchant. If less has been sold, then it is likely that less will have been put on the fields. Although these indicators can be dangerous if you need to be precise in your conclusions (e.g. the insecticide may have been sold but not used), they can also be cheap, and they are also being gathered independently of your project.

Remember: for every indicator you define, there has to be a means of verifying it.

6.2.3 Timing

Having decided what you will use as your indicators, you need to work out at what intervals you are going to measure them. The nature of the things you are measuring might well determine how often you measure them. Remember, you are after an indication that the project is achieving its objectives, you don't necessarily need a huge piece of detailed research to see that the project is on track. In general, objectives higher up the logic will be measured less frequently because they are expected to change more slowly (but you will also often be hoping to show that those changes are long lasting or permanent).

Make sure you put time markers and limits on the project from which you can monitor things and numbers. Ask yourselves 'what do you expect to happen and by when?' Unless you are able to use absolute calendar dates, it is a convention in indicators to describe these time intervals in terms of time elapsed since the start of the project. Thus, the beginning of the project is called t^0, 1 year on is t^1, end of 5 years is t^5 and so on. This can often be a very useful way of describing time intervals, especially when the start date may be dependent on funding.

6.3 Monitoring

Without monitoring, you will have no idea what decisions to make in the daily management of the project.

6.3.1 Monitoring your resources

In a project budget, all of your money is committed. But in order to know that you can still do activity X in your plan, you need to keep an eye on other costs. If the local tax that you must pay to the local authorities has increased, for example, maybe you can no longer

afford to do activity X. You need to ensure that your original budget is actually matching up to reality. You cannot afford to make mistakes because money is limited and has to be accounted for.

You need to work out a detailed phasing of your budget, and think of a tracking system so that you know how much you have spent on everything. This will allow you to monitor how you are getting on against your original plan. If one activity has cost a lot more than you envisaged, what implications will this have for the project? You might have also saved money in another activity that means you still have enough resources to carry on with your plan.

The simplest monitoring consists of comparing a table of where you would expect the money to have been spent against the actual picture. This is likely to be broken down by results areas in the logical framework.

	Planned		**Actual**		**Consequences**	
	Personnel	Materials	Personnel	Materials	Personnel	Materials
Activity 1						
Activity 2						
Activity 3						
TOTALS						

6.3.2 Monitoring activities and timing

If things take a lot longer than you originally thought, you should work out what caused them to be late, and what does that mean? Can you still manage to do the other activities in time? Sometimes timing can be crucial.

You will, of course, know that you had to finish the feasibility study of whether a water sluice could be installed before you could actually put the sluice in. But, if you are two months late with the study, you may find that you have missed the window of opportunity to build the sluice before the winter months come in, which may mean that you will not be able to control the water levels next spring. Thus to shift one set of timings can have knock-on consequences. The trick is to ensure that you understand these connections – so that the consequences are not unforeseen.

You may find that you are not collecting results from some bird survey transects as fast as you had hoped. If you carry on, the study will not have enough data to be worthwhile. So you might need to cut back on some other work to get some extra manpower. Or perhaps abandon some of the study design so as to make sure that the end results are still good if perhaps more limited.

You also need to monitor:

- whether you are hitting the milestones that you set yourself in the plan
- whether other people are actually delivering the task they are responsible for.

You are constantly revisiting the logic from your plan and checking that you are on track. Monitoring is the way that you do this.

6.3.3 Monitoring your impact

We measure the impact of a project to see whether it has achieved what we thought it would. Although it is often very difficult to measure a quantifiable difference, if you can, then you should. It is a good idea (and also good practice) if the person measuring the impact of something can be a different person from the person that was doing the piece of work of which this indicator is endeavouring to measure the impact. This will reduce the risk of results being created to fit more closely to the initial objective than is really justified. At this stage we need to remember that we may not only be monitoring the impact of the project objectives but we may also need to think about the potential impact if any of our assumptions are proving invalid.

You have been involved in helping to preserve the number of seabirds on an island, by removing all the introduced predators from the island. Seabird populations have bounced back. However, supposing that at the same time as all the predators were removed, fishing activities around the island ceased, thus changing the food supply for the birds. Externalities like this can make a huge difference to the conclusions you can draw about the actual impact that your particular project has had.

6.3.4 Monitoring the assumptions

Monitoring means looking at how you are doing with every aspect of your project plan. It means measuring more than just the project objectives themselves. Assumptions are external factors, such as political turmoil or climate change, that might affect whether or not your project succeeds but which are out of your control. Although you may not necessarily be able to do anything about these assumptions, you still need to monitor them, as, if they do not hold true and do start to have an effect on your project, you might need to reconsider whether you can modify your project to mitigate their

impact. There is no point in merely monitoring those indicators that you have identified as part of your project plan if the whole background changes for external reasons. For example, a change of political circumstances might invalidate your assumption that the environment department would support your recommendations for a protected area. Early awareness of such a change would give you a better chance of adapting the project to achieve its most worthwhile result in spite of this setback.

6.4 Evaluation

This means analysing and thinking through what the information gathered from your monitoring actually means. It is similar to the discussion of the results that you would find in a scientific report. You are likely to say to yourself 'this was the original objective, this is what actually happened now that we have started doing the project, this is the monitoring that is going on and this is what it means in terms of the effect that our project is actually having. Compared with where we wanted to go, this is how far we have got.' The project might be exactly on track, or behind time. Maybe it has not had quite the degree of impact you expected it to, or perhaps it has achieved a lot more than you thought, and you realise that, if you had known then what you now know, you could have been more ambitious at the beginning.

If you are not reaching where you predicted in your project plan, you need to ask how you can modify your plan. It will mean going around the project cycle again (see section 1.3 – page 4), devising a new plan, implementing your new plan, monitoring and evaluating it and hopefully then reaching where you want to be. Steadily your plan and the set of objectives you are using will be getting closer to the point which you set out to achieve (you will have achieved your project purpose).

Evaluation can be conducted at different levels for different purposes. For example, a project might have a steering group. You need to ask who is going to be represented on this (both individuals

or people at whatever level appropriate) and how often are they going to come together and for what purpose? Is this group purely advisory, or are they responsible for high level decision making? In the case of a larger scale project, for example, the directors from each of the agencies could come together once a year to see that the project is on track. However, on a day-to-day basis, this level of authority will not only be impossible, it is also unnecessary. What is important is that, where any kind of evaluation is undertaken and its consequences assessed, there needs to be pre-agreed clarity as to who has the responsibility for what level of decisions, and what are their respective limits. It is vital to ensure that everyone understands what their limits and levels of authority are. These need to be established at the beginning as part of your project plan.

There is nothing that causes more difficulties with projects than misunderstandings about what people are expected to do.

6.5 Reporting

What comes out of the project following return from the field phase essentially determines its conservation value with respect to the initial objectives. A report is simply reporting back against what you were setting out to do, no more and no less. Details about travel plans or diet and health in the field, for example, may be interesting and amusing to you, but they are likely to be irrelevant to your funder. Each funder will have their own rules about how often they expect you to report back to them, and will also often have their own formats, with specifications for what they require. Other stakeholders involved in your work may not have rules but they certainly have particular interests. However, there are some key things that you should remember when writing any report.

- It is very important to remind the reader what it was that you were setting out to do. This might mean repeating the objectives that you set out both overall in the project and also in the time frame that you are reporting on. If the reader is

forced to refer to other documents, it makes things a lot more difficult for them. Remember they are unlikely to have the same level of knowledge or enthusiasm for the project as you do.

- If you have been monitoring the project properly throughout, writing the report will be an easy process, because you will already have all of your information clearly set out.

Writing reports takes time. In your project plan, you need to include time for team members to do this.

Deadlines are important, not just for the project but for the reporting too. If funders ask you for a report by a certain date, there may be a reason why they need it then – perhaps they have a meeting schedule or need it completed before embarking on their next grants round. This is another example of how important it is to maintain a good relationship with the funders. If a report takes a long time to appear after completion of fieldwork, it signals that you do not regard it as that important, which is not at all the kind of impression you want to convey to any of your stakeholders, let alone the funders!

Remember to leave time to chase others to deliver all the components, to collate these, for editing the document and for things that might go wrong with computers, photocopiers, postal systems, etc. Do not set aside the university holidays to write the report if the computer labs are going to be closed (or if you yourself are going on holiday-you might think you can write a report sitting on the beach, but not many people actually do).

6.5.1 Types of report

Brief update

A report can be a very simple and short document. Most people cannot afford the time to read huge volumes of text, and they will

not thank you for sending them vast numbers of pages, particularly if the information is not well digested and clearly presented. What they really want to know is 'how the project is going?', and so the report should have the kind of answer you would give to a friend who asks just that. A brief update is simply to keep people informed. It might be done weekly, monthly or six monthly depending on the time scale of your project, but it needs to be brief and to the point.

Quarterly update
This might be more detailed, it might have some monitoring or details of expenditure against the budget, and you might want to look at the cash flow and overall trends of the project. It is also a useful way of seeing if there are any mid-term corrections you need to make such as allocation of resources. This report helps you to manage the project in an informed way, so you can make adjustments. It also helps the person funding you to help you make your decisions (and, where necessary, to approve them).

Annual report
This will be a much longer review of the project. You will want to register your long-term progress against the higher-level objectives in the project and look beyond the day-to-day issues such as the detailed budget. This report will help you to see whether your project is on track in overall terms, in general direction and whether or not the progress so far is going to achieve your objectives. It will also help you identify whether you need to decide on a project extension, get some more money for phase two, or finish it early.

End of project report
This will mean pulling everything together. As well as assessing the last period and the progress achieved by the end of the project, you will be looking at the whole of the process right from the beginning. You will compare your objectives, look at what has happened along the way, summarising the changes you made along the way, and seeing where you are now.

Finally, you need to ask yourself the following kinds of questions.

- What happens now?
- What do you see as being the long-term impact of your work?
- How do you see the benefits of your project might be sustained in the future?
- Who is going to take over the work if it is going to be continued?
- What are the likely resource requirements and demands to continue the work, and what are you prepared to do to try and gather those resources?

By reporting on the whole project in this way, you can see how good your original plan was, and see what you and your project partner have learned in the process. Others can then also learn from your experiences, so if you can put your report on to a project website then do so – some funders may even insist on this.

Targeted reports

Different stakeholders in the project have different interests. They may require different kinds of report. Reports should be targeted to be suitable for the recipient. You need to think about:

- language
- technical detail
- length
- physical appearance
- illustration
- frequency of production.

6.5.2 Putting together the report

This can be a painful process, but it becomes especially so if you haven't been organised in the first place. To avoid this, at the very beginning of your project, you need to make it clear with all your project team exactly what will be expected of them in terms of project reporting, and devise a schedule for this. You need to work out who is going to be responsible for doing the reports, what format they are going to be in, and how often they are going to be produced. It is important to put together some kind of schedule for

the reporting well ahead of time.

Any of the other people involved in feeding information into the report also need to know the details of the reporting. If you have gathered the information as you go along and you use the internal reporting mechanisms between team members as a way of keeping your monitoring and evaluation up-to-date, it is then really only a case of summarising all of these. It is also very useful if you can send out the outline of the report with the subheadings and deadlines to those who will be contributing to it. This makes it easier for people to get started on the report, to see where their writing fits into the bigger picture and also it then makes your editing job a lot simpler. If the external report becomes a separate exercise that is over and above your normal project management, then you are also making another job for yourself.

- Write a clear and succinct summary of the key points. Many readers will only take a very brief scan of the detail in the body of the report, but they will read the summary.
- Present the text in short, easy to read prose.
- Keep the whole thing as short and focused as possible.
- Don't use jargon and keep it simple – it might be that the person reading the report will not be as much of an expert in the subject as you.
- Summarise information in tables and diagrams. This forces you to be clear and bring out the essential factors of what has actually happened in as few words as possible.

Annexes are important in reports, but don't put anything into the annex that is essential to the story, because it almost certainly will not be read. They are best used as backup material that can help bring the text to life, with things such as photographs, diagrams or published papers etc. If you can use pictures to tell the story then do- there is nothing better than a 'before' and 'after' picture of what you have done.

Not writing a report of your project is inexcusable. A report is not only good for you, but is also a common courtesy to your funder, and is the only way that your project work can be used to benefit the greater conservation cause.

6.5.3 Project appraisal

The process of project appraisal after completion is frequently ignored, or exists as informal discussions amongst team members. Even if the project is not planning a further field phase (an aim that should be very much encouraged from an early stage), an assessment of the successes and failings of all stages of the project provide invaluable information for future conservation projects who may turn to you for advice. Here, taking an honest look at the methods that did not work and trying to understand why, often provides useful lessons for the future. This can be especially valuable if your project forms part of the wider programme of a large conservation NGO or government department, but it is also of value to you.

If your project goes well, you collect some good data and you pass this data on, it is likely that your conservation project will do a lot not only to help conserve your species, but also to educate others and help to continue the important work. As we said at the beginning, you cannot hope to change the world (at least not completely) but, well focused and well managed projects can be another bit of help in the fight for conservation and biodiversity.

Section 7: Sources for further information

7.1 Project management resources

Facilitator's Guide to Participatory Decision Making
Kaner, S. et al., New Society Publishers, Canada, 1996

Facilitiation – Providing Opportunities for Learning
Bentley, T., McGraw-Hill Publishers, 1994

Various resources on ZOPP (Objectives Oriented Project Planning) and Project Cycle Management GT2 – available and downloadable on http://www.gtz.de/english/

Lang, H (ed.): Managing On-site Project Implementation: A Guideline. Deutsche Gesellschaft für Techniche Zusammenarbeit (GTZ) GmbH, Sonderpublication der GTZ, No. 204, 1989

Commission of the European Communities, Evaluation Unit Methods and Instruments for Project Cycle Management: Manual Project Cycle Management: Integrated Approach and Logical Framework, No 1, 1993

7.2 General research

Biosis
http://www.biosis.org.uk

Earthwatch
http://www.earthwatch.org

Earthsystems
http://www.earthsystems.org

Conservation Online
http://www.palimpsest.stanford.edu

Cornell Lab of Ornithology
http://www.ornith.cornell.edu

Online Natural History Book Service
http://www.nhbs.com

UNEP World Conservation Monitoring Centre
http://www.wcmc.org.uk

World Conservation Union
http://www.iucn.org

Wildlife Conservation Research Unit
http://www.wildcru.org

World Resources Institute
http://www.wri.org/wri

Royal Geographical Society
http://www.rgs.org

7.3 Organisations

BirdLife International
http://www.birdlife.net

Botanic Gardens Conservation International
http://www.bgci.org.uk

Conservation International
http://www.conservation.org

Declining Amphibian Population Task Force
http://www.open.ac.uk/daptf

Fauna & Flora International
http://www.fauna_flora.org

Forest Conservation Portal
http://www.forests.org.

International Institute for Environment and Development
http://www.iied.org

International Union for the Conservation of Nature (IUCN)
http://www.iucn.org

International Whaling Commission
http://www.iwcoffice.org

Nature Conservancy (USA)
http://www.nature.org/

Rainforest Foundation UK
http://www.rainforestfoundationuk.org/rainhome.html

Resource Africa
http://www.art.org.uk

The Royal Society for the Protection of Birds (RSPB)
http://www.rspb.org.uk

Species Survival Commission
http://www.iucn.org/themes/ssc/index.htm

Survival International (indigenous people)
http://www.survival-international.org

Traffic
http://www.traffic.org

7.4 Directories

Cambridge Expedition Society
http://www.cam.ac.uk/societies/cuex

Virtual library of ecology and biodiversity
http://conbio.org/vl/

Directory for environmental organisations
www.webdirectory.com

Annex 1: The planning workshop

Many of the planning stages discussed in section 3 are best undertaken in a workshop environment. All projects, however small, should try to have some kind of a project-planning workshop involving all the major project partners. The length and participation level of stakeholders in this workshop will depend on the type and size of the project. A participatory workshop for project planning ensures a common understanding of the project by all project partners.

Workshop participants should:

- have a good knowledge of issues surrounding the proposed project
- be representatives from project partners, relevant government agencies, representatives of local communities, or experts
- participate for the whole workshop period.

The group should follow a set of analytical steps to develop the project plan. Many of the techniques can be simplified but it is still worth following a similar order and logic.

Resources for the workshop

- If possible, someone with good experience in word processing should be available for the whole workshop period.
- A person should be appointed to assist with administrative matters during the workshop.
- Lap-top computer and printer.
- Three flip charts with paper.
- Pinboards or walls on which to stick cards.
- Other cards, felt pens, glue, 'sellotape', pins, scissors and paper.

Venue of workshop

- If at all possible, a location away from the participants' workplaces should be chosen so that participants are not distracted or tempted to temporarily leave the sessions.
- In order to improve group dynamics and to allow discussions

in the evenings, it is an advantage if participants can stay in the same place overnight.
- The venue should allow for quiet, undisturbed working (even during evenings) and for some relaxing walks.
- The room in which you conduct the discussion should allow for chairs to be arranged freely. A lecture theatre with elevated seating, for example, is not suitable.
- There should be sufficient wall space to attach very large papers.
- Break away areas should be available for smaller group discussions.

Workshop invitations
The workshop date should be arranged well in advance. It is important that all key participants be available. Follow-up with formal invitations.

In your invitation, highlight the importance of the workshop, give workshop objectives, date, time, venue. Attach programme and relevant background information, and send a reminder 1 week before the workshop, attach supporting material, map of venue, if necessary.

Typical workshop programme
The workshop programme can only be tentative and changes might prove necessary as the workshop progresses.

Day 1
pm: – arrival of participants
– opening of workshop (in some cultures it is important to ask a senior person to make a formal opening)
– presentation of individual participants (name, organisation, function)
– presentation and discussion of workshop objectives
– presentation of workshop approach, programme, rules (facilitator)

Day 2

am: – Discussion of project framework (i.e. definition of project area, subject), budget ceiling, project partners
– Participation Analysis

pm: – Problem Analysis

Day 3

am: – continuation of Problem Analysis

pm: – Objectives Analysis and Project Strategy

Day 4

– Logframe (objectives, assumptions, indicator ideas) outline budget
– roles and responsibilities, next steps

Facilitators

We encourage active participation in planning workshops and it is often advantageous to involve a workshop facilitator. While small groups of up to six people who know the method and who respect each other can easily work without a facilitator, large workshops with different stakeholders will certainly require facilitation. With guidance from the participants, a workshop facilitator who is familiar with the method can help to lead the discussions.

Furthermore, a good facilitator will ensure active participation of everybody and avoid domination by a few vocal individuals. A good facilitator should only facilitate and must not lead the discussion. Questions or contributions by participants should be referred back to the other participants and not commented on by the facilitator. The facilitator should be seen as independent and neutral he/she should enjoy the trust of all participants and must not be seen to favour the ideas of one group or the other.

To select a suitable group, contact large conservation or development agencies for names of suitable individuals and try to get references about their previous facilitation work. Meet with potential candidates and discuss the objectives of your workshop. The chosen facilitator will need to be thoroughly briefed

beforehand. Throughout the workshop, there should be review of the progress and discussion of any problems that arise by the planning process co-ordinator and the facilitator.

Getting the best wisdom from groups of people is a subject in which the facilitator should be skilled. There are several practical techniques for dealing with difficult problems and helping people break out of their normal modes of thought and explore new solutions and viewpoints of others. We strongly recommend using visualisation on cards as outlined in Annex 2. The workshop report should be produced by the facilitator. As the format of the report is likely to be highly technical, it is proposed that circulation should be limited to workshop participants. Circulation of the report should be no later than 1 week after the workshop.

Annex 2: Visualisation

Visualisation on cards is recommended as the method of choice for planning workshops. The method is based on ideas from individuals written on cards and pinned on pin boards or stuck on walls for debate and organisation by sub-groups and/or the whole group. This process is similar to a 'structured' brainstorm, but has the advantage that each idea is captured on a single card that can later be grouped and moved as necessary. In this way, no idea is lost and each idea is eventually moved to find a logical place alongside other ideas.

With participants working together to produce ideas and to structure these ideas, a team spirit is fostered which "owns" the eventual result. The idea of writing ideas on cards also assists in overcoming the dominance of senior, vocal or controlling individuals. In the process every idea, regardless of the status of the author will be considered, thus ensuring a maximum of ownership among all participants. Below we describe a step-by-step guide to use visualisation on cards in a planning workshop situation, but the method can also be applied in the field for group meetings with local people.

Cards
Prepare thin cardboard cards – one-third of A4. Depending on the aim of the workshop it might be useful to prepare cards in different colours. One colour might be used to brainstorm problems, the other colour might be used to brainstorm opportunities and so on. Bring enough materials – say 50 cards per participant per workshop day.

Pinboards
Experience shows that the use of drawing pins and pinboards with stands are ideal in some circumstances. You will need five to eight pinboards (or half the number if both sides can be used). Prepare large sheets of packaging paper, the size of the pinboards (stick several sheets together with sticky tape if you can't find the right size). Pin one sheet of this paper on each of the pinboards. This

allows you to glue the cards with permanent glue on the paper, once the group has agreed the result. This sheet of paper can then be hung on the wall for reference or taken away for recording the results in the workshop report. Replace with a new sheet. You will need about five sheets per pinboard per day.

Sticky walls
Another well-proven alternative is the use of large sheets of wrapping paper (stick several sheets together with sticky tape if you can't find the right size) pinned on to a wall and treated with spray mount. Spray mount is a type of glue that allows you to stick the cards on paper, remove them and replace them again. You will need about one tin of spray mount per 1-2 days (depending on surface area needed and the prevailing heat and humidity); it is available from photo shops. Spray the wrapping paper about one hour before the workshop (this is best done outside, if possible); re-spray occasionally as necessary. Take care to ensure the room is well ventilated, especially soon after spraying, to minimise the effect of the spray solvent on the workshop participants! Another very practical alternative to using wrapping paper is nylon sail or parachute material, which can be purchased in large sheets and cut to size. When sprayed, it has the big advantage over paper of being easily transported (it folds very small) and can be re-used many times, simply folding the sticky sides together whilst in transit, then peeling them apart when next needed.

Even simpler in principle (but rather more fiddly in practice) is to stick the cards directly to a wall with an appropriate removable adhesive (like Blu-Tack).

It is essential to record all wall and card exercises. The cards and their layout can be typed at the time or photographed with a digital camera. Another useful trick is to quickly number all the cards then draw a quick skletch of their wall positions relative to one another. The cards can then be taken down and stacked in groups, but the wall arrangement can be easily re-created when needed. Rolling the sticky sheets up with the cards still on them is risky as things can easily come unstuck.

Pens
Purchase thick, permanent felt pens (flipchart markers), two for each participant.

Room
Choose a room with sufficient wall space to allow the results of the brainstorm exercises (large sheets of paper) to be hung on the wall for reference. As all results of the working sessions will be visualised on pinboards and later recorded in the workshop report, participants should not take notes and tables are therefore not recommended. Arrange chairs, in two or three rows if necessary, in a semi-circle around two or three pinboards Leave corridors to allow participants easy access to the pinboards. In workshops with large groups, it is often necessary to break into sub-groups for in-depth discussions. Choose a room which allows several groups working with pinboards or on cards alongside each other, or better still ensure that there are breakaway rooms available.

Rules
The basic rules for visualisation on cards are very similar to the standard brainstorm: participants' ideas are collected without discussion, and consensus is reached through group discussions. As ideas are recorded on individual cards, they can be clustered (similar ideas grouped together) and arranged in a hierarchy to facilitate consensus. If for example you want to agree on a starting problem to be addressed by the project, you could ask participants to write down one idea each. After a few minutes, collect the cards and stick them on the pinboard. Cluster if appropriate. Start with one cluster of problem and decide whether a second cluster of problem is at the same level, or a cause or effect of the first. Place the card(s) of the second problem cluster above the first, if it is an effect, below the first if it is a cause, and next to it if it is on the same level. Proceed in the same way with all other cards or clusters. Decide on the appropriate level for your project (i.e. which problem is feasible for the project to address) and agree on a final formulation, either through selection of an existing card or through rephrasing.

Cards

There are some simple rules for writing cards. The principle of this visualisation technique depends on moving individual cards to allow structured discussions. It is therefore important to record only one idea per card. Cards should be easily readable for all participants. Distribute one felt pen each to participants and allow only the use of these. Remind participants to write large and clearly, so that participants sitting at the back can read the cards. Writing can become unreadable if there are more than four lines of text per card. Encourage participants to express their ideas clearly.

Remember that results will need to be understandable for people who have not participated in the workshop. Seek clarification for each card and correct. If, for example, you brainstorm problems in a national park, 'degradation' as a problem is not specific enough to allow further analysis. A much better formulation would be '50% loss of hardwood species in the park's primary gallery forest since 1970'.

Remember, however, that one advantage of the technique is anonymity. Although you will often be required to seek clarification on the content of individual cards, do not try to force people to disclose authorship. Instead, ask the group as a whole if they understand, or can explain what they think that card might mean. It is better to discard a card if you can't clarify its content.

Annex 3: Glossary of technical or project-specific terms used in the text

Every subject has a set of language that is used by specialists and that can often be quite confusing for outsiders. Unfortunately, planning is no exception and there is also considerable inconsistency in the use of words. Although we would like to keep the use of jargon to a minimum, precise use of language does prevent confusion. Below, we therefore give a list of the most important words and their meaning. We have made every effort to use the language in a consistent way throughout this booklet.

Activities: tasks that are necessarily done to achieve individual results. Activities are the lowest level of the logic of a project plan as shown in a log frame. They (and sub-activities or tasks) are the units on which budgets, workplans and short-term management are based.

Aim: a term sometimes confusingly used in the place of objective, purpose or goal. We prefer not to give the term any formal meaning within project planning and to avoid using it where it might confuse.

Agenda 21: along with the Convention on Biological Diversity, Agenda 21 was another important output from the 1992 Rio Earth Summit. Agenda 21 concerns sustainable development and has generated a wide range of plans and actions at scale from the national to the local.

Assumptions: problems or potential problems that bear on the successful achievement of the project goal and purpose but by planned decision will not be tackled by the project. If circumstances show the assumptions to be invalid, the project risks failing to achieve its objectives. Assumptions usually concern issues that are too large for the project to tackle and are commonly in the political or economic realm. They are important to a project analysis because of their bearing on the overall feasibility of the project.

Auditing: usually applied to the process of checking the financial soundness of a project (though other professional standards can also be audited). Auditing is usually based on verifying that the systems for finance management are sound and checking on a test basis that the numbers are consistent. Larger funding sources will insist that auditing is carried out professionally and that finance management accords with a named standard.

Bottom-up: a style of project discussion and decision making which seeks to ensure that the stakeholders closest to the ground and the issues with which the project is concerned are the primary sources of influence.

Budget: the plan for what a project is going to cost (broken down into classes of expenditure and timing and where this money is going to come from). Ideally, a budget is derived from the costs and logical timing of the individual activities that appear in a log frame. An income budget will predict where the money will come from to meet these costs. The income budget will show the grant you may be applying for but also any other funds, which might match it, and any costs provided in kind.

Convention on Biological Diversity (CBD): the most significant convention on conservation, which most countries on Earth have signed. CBD has brought new impetus, new planning and new money to the subject.

Conventions: internationally non-binding agreements which governments have reached. Several bear on biodiversity conservation and may be the source of projects and activities to which you could contribute.

Disbursement: a term used by the larger funding agencies for the rules and processes by which they pay. These can be complicated and potentially risky for the unwary.

Eco-regions: regions that share common potential vegetation and climate characteristics and thus similar biodiversity. Those with

important biodiversity and significant human modification are areas of conservation priority. WWF has promoted a concept that is similar to but more detailed than CI's Hotspots approach.

Evaluation: usually used in the combined term monitoring and evaluation. Evaluation is the process of judgement following review of monitoring data.

Goal or, sometimes, overall goal: the highest level of planning objective, which is greater than the contribution of the project alone. The overall goal is a desirable future state to which the project will significantly contribute, but additional work will also be required before it is fully brought about.

Hotspots: those quite small regions on Earth which hold a disproportionate richness of species by virtue of concentration of endemism and have lost a high proportion of their natural vegetation cover. Conservation in these regions is not sufficient alone to tackle the global biodiversity crisis but is nonetheless disproportionately important. Hotspots have especially been championed as a conservation focus by Washington-based NGO, Conservation International.

Indicator: a quantifiable measure of achievement of an objective (which might be at any level). The precision of the indicators is what gives an objective the property of being SMART (see below) by making the meaning explicit and quantifiable. At the level of objectives, indicators should ideally measure changes of state rather than process that was necessary to change the state. Process measures may be applied to activities. Impact indicators and process indicators are sometimes distinguished by name.

Key informants: individuals who by virtue of position, experience or technical knowledge might reasonably represent the views of particular stakeholder groups. Key informants may be required where stakeholder groups are large and it is not possible to work with all individuals. They need to be chosen with care to ensure that they really do represent the views of a stakeholder group.

Log frame: a common abbreviation for a logical framework. Log frames offer a structured and disciplined way of formulating and describing a project with hierarchical objectives and activities, indicators and means of their verification, and assumptions. Log frames are a huge help to fundraising, budgeting and project management. If this book has one message, it is that projects are more likely to succeed following this kind of logical discipline. Log frames are one of a class of (similar) methods and the one that we have chosen to elaborate in detail.

Means of verification: the source or process from which indicator data are derived. They should refer to traceable reports or documents and should be as independent as possible from the project, though for technical matters this may not always be easy.

Milestones: short-term targets used for project management purposes. Milestones may not always appear on a log frame (except perhaps within the detail of some indicators) but they will appear in workplans. While project targets will always be quantifiable changes to the external world, milestones might also include measures of process in the form of parts of activities completed.

Memorandum of Understanding: a written formalisation and recording of an agreement between organisations or sometimes less commonly individuals about the terms with which they will collaborate on a project. MoUs are common in circumstances where the legal weight and formality of a contract is not thought to be necessary or appropriate because legal enforcement in the event of something going wrong would not be likely.

Monitoring: the process of periodically measuring progress (by use of indicators or against milestones) by which it is possible to tell whether a project is on track. Monitoring should be going on all the time but in general will be more frequent and less formal at the lower levels of logic, which guide daily implementation. Monitoring is likely to be more formal at the higher levels that may be assessed quarterly or annually.

National Biodiversity Strategies and Action Plans NBSAPs: in compliance with the Convention on Biological Diversity most countries have produced various documents describing strategy and plans for conservation. These offer valuable guidance for understanding national conservation priorities and opportunities for contributing to the bigger picture.

Objective: a desired situation in the future, which represents a change from the present. Objectives should be SMART:

- Specific what, where, when
- Measurable quantity rather than quality
- Achievable realistic
- Relevant necessary
- Time-bound to be realised by a named time.

A difficulty with the word objective is that it may used to describe a goal, an aim, a purpose, an output or a result. All these usages are included within the definition and are legitimate but can cause confusion if used ambiguously. The words aim, target and output are not used within the approach described in this book.

Objective tree: a method of visualisation of objectives to show logical connections in a branching hierarchy. Objective trees are derived directly from problem trees and have a virtually identical structure though a project may choose only to tackle some of the whole suite of problems and objectives. In this case, those not tackled are likely to become assumptions.

Objectively verifiable indicators: see indicators above. All indicators should be objectively verifiable. This means that given the sources of data (Means of Verification), a reasonable person would reach the same conclusion about progress towards an objective.

Outputs: a term sometimes used as an alternative to Results.

Participation: the process of involving stakeholders in the development and execution of projects. Stakeholders are critical to project success and there are a variety of devices to secure their participation.

Participatory Rural Appraisal (PRA): a class of methods for understanding and engaging stakeholder needs interests and knowledge in project development. PRA is particularly important for traditionally disempowered stakeholder groups who for political, cultural or economic reasons may not otherwise be readily able to engage.

Problem: a phenomenon whose current unsatisfactory status either directly underlies the need for a project or is related with a causal linkage. Problems can be analysed and visualised in a branching tree-like form showing their causal relationships as effects or causes of one another. Individual problems can be restated as objectives, which are simply statements of a preferred future state when that particular problem has been solved. The logical structures of a problem tree and of an objective tree are identical.

Problem tree: a method of visualisation of problems to show logical connections in a branching hierarchy. Problem trees can be turned directly into objective trees by reformulating the desired future state of the individual problems. The trees have identical structure. We believe that a clear articulation and visualisation of the problem tree is the centrepiece of the rational development of a complete and necessary project.

Procurement: the process of acquiring goods and services for a project. Some funders apply special rules to procurement to ensure the demonstrable wise use of money and good value for expenditure.

Project: a linked and planned set of activities and their resource needs which when combined achieve an objective. Projects vary in scale, so one person's project may only be a lower level result in a much bigger project. If more than one purpose is being met, this is

then better regarded as a collection of projects which share the same overall goal and collectively this would normally be regarded as a programme.

Project cycle: the logical order in which projects are developed and implemented.
ideas ➨ concept ➨ stakeholder analysis ➨ problem analysis ➨ objectives analysis ➨ project strategy ➨ logical framework ➨ roles and responsibilities ➨ resource inputs ➨ fundraising ➨ implementation ➨ monitoring and evaluation ➨ reporting

Project strategy: the high level outline of the objectives that a project will strive to achieve. Once a problem has been analysed, there is a choice of alternative strategies that a project might pursue. An important phase of project planning picks the most appropriate from alternative strategies by appropriate criteria.

Purpose or project purpose: alternative terms include project objective or immediate objective. This is the highest-level objective that will be achieved by the project if all goes to plan and none of the assumptions turn out to be invalid. There should ideally be a single purpose to a project.

Red List: the listing and documentation of species at unnaturally high risk of extinction. The official Red List is maintained by IUCN and species have to meet strict and well-documented criteria. This is an important mechanism to ensure the priority of the species subject to conservation projects. Confusion is often caused by national Red Lists, which may be based on different criteria. It is always as well to make a reference to the global status of a threatened species.

Resource inputs: the people, materials and money required to achieve a project.

Results: the next lower level of objectives below the single purpose of the project. There will be several, usually between about 4 and

10. The results are all necessary and together sufficient to achieve the project purpose provided the assumptions hold. Results are sometimes called outputs but this can be confusing as this term is often used to refer to tangible objects produced by a project.

SMART (Specific, Measurable, Achievable, Relevant and Time-bound): The term is applicable to Objectives (see above) at all levels. The property of being SMART or otherwise is most easily detected from the quality of the indicators associated with an objective.

Stakeholder analysis: the process of identifying stakeholder groups and assessing their interests and potential impact on project objectives. A stakeholder analysis determines priority actions to deal with matching stakeholder interests to project objectives.

Stakeholders: those people or groups who are significant to a project setting by virtue of being influenced by or having overlapping interests with the issues involved. Stakeholders may be inherently sympathetic to a project and be potential collaborators and beneficiaries. Alternatively, they may have apparently conflicting interests. Either way, the participation of significant stakeholders will be critical to the success of a project.

SWOT: Strengths, Weaknesses, Opportunities and Threats. A method of analysing data on a project group or institution or a project idea to help to ensure that project purposes are appropriate to the group and its setting in a wider universe.

Top-down: a style of project discussion and decision making in which a small group of senior or influential people take the lead usually by virtue of being the people with access to and responsibility for the money.

Verification: the process by which indicators are validated. Verification should report quantitative facts in a recorded format that could be revisited by anyone who would draw the same conclusions. Verification should if possible come from sources

external to the project or at minimum, independent of the people who have done the relevant activities.

Visualisation: a variety of methodologies that help everyone to participate in discussions and ensure that the results of work in progress and stages completed are visible to all on a wall or charts. Visualisation is essential to maximise participation in a meeting. The antithesis of visualisation is note-taking where no one can be quite sure just what is documented as having been said or agreed.

Workplan: a class of devices to document the timing of activities and the people responsible for them. Workplans sit below the logic portrayed in a log frame but are necessary for the management of a project in its implementation phase.

The organisations involved in producing this manual:

BirdLife International

BirdLife International is a worldwide partnership of organisations working for the diversity of all life through the conservation of birds and their habitats. BirdLife works at all levels, linking developed and developing countries, amateurs and professionals, scientists and conservation managers. It pursues co-ordinated international policies, campaigns and programmes based on sound scientific analysis. It aims to prevent the extinction of bird species by conservation activities in crucial bird habitats, working with local people, and using local expertise and knowledge to ensure grass-roots support. To facilitate this, BirdLife has Partner organisations in 72 countries or territories, with Affiliates in a further 32.

The RSPB

The RSPB works for a healthy environment rich in birds and wildlife and depends on the support and generosity of others to make a difference. Since its founding in 1889, the RSPB has grown into Europe's largest wildlife conservation charity, with more than a million members. Internationally, the RSPB's focus is on identifying and conserving key habitats and species, working with other BirdLife Partners to help them set and deliver their conservation priorities. The RSPB works with BirdLife Partners to influence decision makers, including governments, businesses and donors. Threats to the world's wetlands, to migratory species, and issues such as climate change are tackled through work on international conventions. Individually developed country programmes provide targeted financial and technical assistance when available. The RSPB works as the main supporting partner to BirdLife Partners in 10 African countries and eight European countries as well as India and Sri Lanka and the UK Overseas Territories. The RSPB is the BirdLife Partner in the UK.

BP

The world's need for energy is growing. Energy and materials used safely and efficiently, are essential to the prosperity and growth of every country and region in the world. Sustaining and enhancing our quality of life depends on them. To play a leading role in meeting these needs without damaging the environment is BP's goal. Being progressive and innovative are the hallmarks of the way they work. Their success depends on their making, and being seen to make, a distinctive contribution in all they do. Good environmental and social performances are key to their business success.

BP's policy commitments are the foundation on which they will build and conduct business. At the core of their policy commitments on health, safety and the environment are the goals of no accidents, no harm to people and no damage to the environment. BP are taking positive action on climate change and pursuing biodiversity action plans in countries where they operate.

Fauna & Flora International (FFI)

Founded in 1903, this is the world's oldest international conservation charity. FFI acts to conserve threatened species of wild animals and plants worldwide, choosing solutions that are sustainable, based on sound science and that take account of human needs. FFI works in more than 60 countries and has members in over 100 countries. Its programmes offer creative and innovative solutions to conservation problems. They involve and empower local people, ensuring that conservation gains for threatened species are sustained into the future.