



# DELIVERING LARGE-SCALE **Conservation Results**

*WWF Program Management Standards for Ecoregions and Large Programs*



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# DELIVERING LARGE-SCALE Conservation Results

*WWF Program Management Standards for Ecoregions and Large Programs*



Produced by: WWF-US Global Support

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# Foreword

Welcome to WWF's newest Field Guide for planning, managing and monitoring our largest conservation programs. This Guide is your blueprint as you develop strategies, align partners and resources, and deliver results in our largest priority programs.

This Guide is based on the *WWF Standards of Program Management*; a set of guidelines, tools and best practices sanctioned by WWF-I as the principal means by which we will carry out conservation worldwide. WWF created the Standards from tangible, field-tested tools and practices as well as private-sector program management expertise that have been adapted for conservation use.

In response to unprecedented local, national and international threats to our planet's well being, WWF and the conservation sector are launching larger and far more comprehensive programs that reflect both ecological and socio-economic needs.

These Network Initiatives, priority places, ecoregions and landscapes are large-scale, multi-level conservation programs that present huge challenges for program managers who now must: develop coherent strategies; generate more revenue; engage multiple partners; mitigate greater risks; and produce globally significant and measurable results.

This is our shared vision of conservation if we are to save our planet. The practices and tools within this Field Guide can help you achieve this vision. WWF has dedicated itself to supporting your use of this methodology through training and direct support as well as the tools, guidance, and best practices you will find within the pages that follow.

We wish you all the best in achieving truly large-scale conservation results.



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**Carter S. Roberts**  
President and CEO  
WWF-US



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**James P. Leape**  
Director General  
WWF-I

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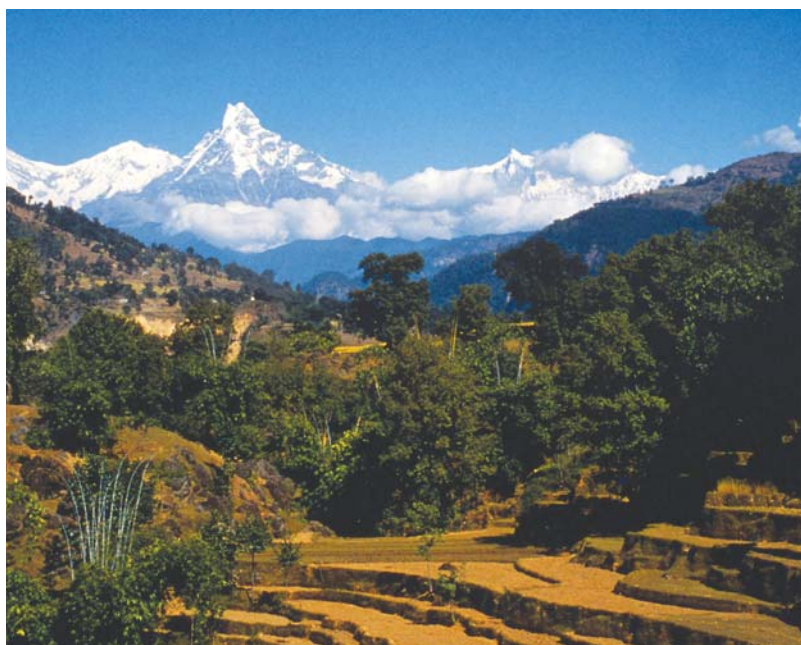
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# Introduction

This Field Guide provides a broad overview of large conservation program management techniques for field conservation practitioners. It offers tools and guidelines for planning, implementing and monitoring conservation programs, and directs the user to more detailed guidance, tools and examples online.

The principal users of this Field Guide are Network Initiative and priority program directors, ecoregion and landscape coordinators, other field conservation staff, and government and foundation managers engaged in large-scale or highly complex conservation programs.



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## I. What are Large Conservation Programs?

Large conservation programs are long-term, complex initiatives that typically involve vast areas, big budgets, multiple donors, one or more countries, several partner organizations, and include a significant sustainable livelihoods component.

This Field Guide is intended to support conservation work on large programs including Network Initiatives, priority programs, ecoregions, landscapes, ecological hotspots, protected area networks, and other large terrestrial, freshwater, coastal, or marine areas.

### Large Conservation Program Characteristics

Program Characteristic	Typical Large Program
Total Budget	\$1 million or more
Duration	5-10 years to over 50 years
Countries	Often more than one
Strategic Partners	Often more than one
Stakeholders	Many diverse interests
Major Donors	Often more than one
Programmatic Focus	Conservation and sustainable livelihoods combined
Complexity and Integration	Highly-linked local, national, regional and global approaches



## Large Conservation Program Examples

The conservation practices used in this Field Guide draw heavily upon real field examples. Most of the examples used in this Guide refer to the following six conservation programs.



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### Reforestation in Terai Arc Landscape

Large-scale, \$200 million, 50-year program to restore forested wildlife corridors and habitat in the Terai Arc Landscape. This landscape spans southern Nepal, Northern India and Bhutan, and includes extensive provisions for community forest management and sustainable livelihoods in addition to wildlife protection.

### Sustainable Protection of the Mesoamerican Reef Ecoregion

Sustainable fisheries practices, extensive protected area network, and improvement of upland water quality entering the reef system are key strategies in this program, managed by four countries (Belize, Guatemala, Honduras and Mexico), an independent trust fund (MAR Fund), WWF, TNC and other partners.



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### Establishing Amazon Region Protected Areas

Establishment, consolidation and management of 67 new protected areas across the heart of the Brazilian Amazon, covering a land area larger than the U.S. National Park System. The Amazon Region Protected Areas (ARPA) program is led by the Brazilian government, an independent trust fund (Funbio), the World Bank, WWF, and other partners.

### Establishing and Protecting Congo TRIDOM Landscape

Long-term conservation within the Tri-National Dja-Odzala-Minkebe (TRIDOM) area of the Congo Basin rain forest and improvement of local livelihoods through sustainable resource use are key strategies for this very large program covering parts of Cameroon, Congo and Gabon, and involving many public and private sector, NGO and local community stakeholders.



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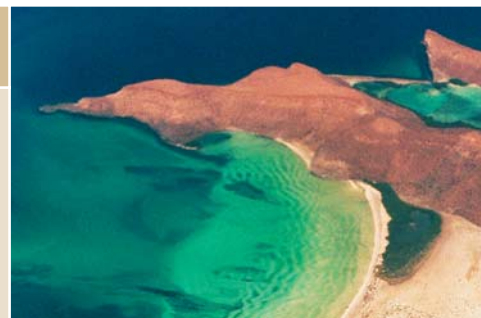
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### Sustainable Fisheries and Wildlife Populations in the Bering Sea

Two countries (Russia and US) and many NGOs collaborate on this huge and intensive effort to ensure conservation of the Bering Sea Ecoregion's diverse populations of invertebrates, fish, birds, marine mammals and people through strategies focusing on threats posed by commercial fishing, marine shipping and climate change.

### Sustainable Fisheries Management for Gulf of California Ecoregion

The government and many NGO and donor partners collaborate in reducing the impact of unsustainable fishing practices on the Gulf of California's many endemic and endangered species, a human population of nearly 9 million, and a fishery that generates more than 50 percent of Mexico's wild-caught marine resources.



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## II. Origin and Benefits of Large Program Management

Large-scale conservation programs are not new. Nonetheless, the past decade has seen increasing efforts to conserve land at the ecoregional — or larger — level because experience demonstrates that smaller, isolated protected areas in many cases cannot support viable populations of key species or intact ecosystems over the long term.

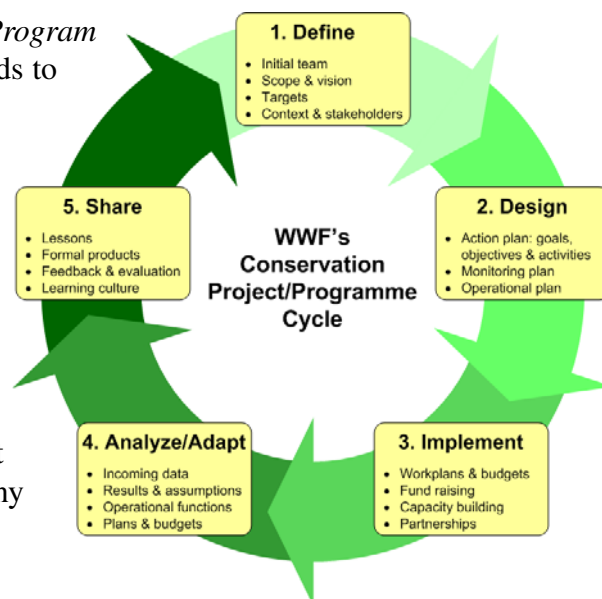
As ecoregion-level programs have proliferated, so to has the demand for large program management techniques to plan, implement and monitor progress at this scale. The tools, processes and examples in this Guide have been developed from both practical field conservation experience and private sector expertise, and are adapted for use in a large conservation setting.

## III. How to Use this Field Guide

The Field Guide follows the *WWF Standards for Project and Program Management*, but with special emphasis on applying the Standards to large-scale conservation programs.

The WWF Standards are in five Steps: Define; Design; Implement; Analyze; and Share. A Resource Chart at the beginning of each section of this Guide has linkable lists of outputs, guidelines, tools and examples. See the Appendix for a complete list of steps and sub-steps.

A detailed overview of the WWF Standards, this Field Guide, and all associated resources are available at [www.panda.org/standards](http://www.panda.org/standards). If you experience trouble with any links, please contact [strategies@wwfus.org](mailto:strategies@wwfus.org).



## IV. Overarching Principles and Tips for Users

The following overarching principles and tips will help guide your progress through the WWF Standards for Project and Program Management.

### Work within key organizational directives

Within WWF, our conservation work is guided by — and often must adhere to — certain organizational directives. These include: the WWF-NL Strategic Principles; the WWF-US integrated local-to-global strategy; and WWF-I principles guiding our work in ecoregions or in the new Network Initiatives. Some of these are described briefly in Step 2.1. It is important in developing your local strategies that you are aware of these broader organizational directives and adjust your plans accordingly.

### Work with Indigenous Peoples

From the first step of organizing your planning team through developing and carrying out your conservation strategies, be sure to engage the indigenous peoples who live in, use or depend on lands and resources that are the focus of your program, or who may be affected by program activities. Refer to [WWF's Indigenous Peoples Policy](#) for specific standards and to the WWF guide [Mainstreaming WWF Principles on Indigenous Peoples and Conservation](#) for guidance on engaging indigenous communities and organizations in your planning process.

### Leverage previous work

As you consider using the Steps in this Guide, you do not need to reinvent previously completed spatial assessments, targets, strategies, action plans, financial plans or other outputs. Use this Field Guide to identify gaps in the work completed to date, and identify the appropriate entry point in the planning, implementation or monitoring process for your program.

### Tailor your tools

The tools presented in this guide are proven management techniques that have been tested and refined with WWF field experience. However, we encourage tailoring the recommended tools within any given step to your specific program and circumstances. As you will see, almost all the tools shown in the examples have been modified to accommodate specific program needs.

### Work on more than one step at a time

Although the steps and activities in this Guide are presented in linear order (step 1.1 through 5.4), in actual practice you will find that it makes more sense to do some steps out of order, or at the same time you are completing other steps. The Guide notes when fully completing one step is a prerequisite for starting another.

### Note both spatial and strategic considerations

As you develop your vision, targets, threats assessment, strategies, action plans and monitoring indicators, keep in mind that large programs have spatial considerations that need to be addressed and mapped. Having access to good GIS support and developing good maps of your region's targets, threats and strategies is essential to achieving great conservation results.



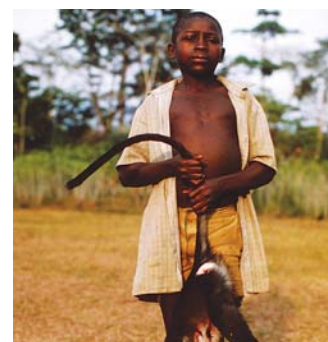
# STEP 1 Define

The Define Step requires you to specify the basic parameters for your program in preparation for the design work that will come in Step 2. Specifically, the Define Step involves identifying:

- All your stakeholders
- Your program team
- The program's geographic scope
- A broad vision statement for your program
- Your program's principal biodiversity targets
- Your program's context, including threats and opportunities

All of these elements are highly interlinked, and most program teams go through this as one iterative process. Change the order as your team sees fit, and revisit earlier elements at any time as you complete this step.

## 1.1 Team Composition and Operations



### Overview

The first task in managing any program is to establish the team responsible for leading the overall design and implementation for your program. Team members typically include staff within your organization and your closest internal and external partners.

To build your team, you will likely draw on the partners, donors and government agencies with whom you work already. In addition, your team should carry out a stakeholder analysis to ensure you have identified the full pool of stakeholders to engage in your program and draw key stakeholders into your team as needed.

Stakeholders are all the individuals, groups, or institutions—community, government, donor, conservation and nonconservation NGOs, and others—that have an interest in or will be affected by your program. They are the organizations whose involvement is critical to your success.

A good analysis will consider each stakeholder's potential role, issues of concern and potential conflicts, and consider both powerful stakeholders and those that might be disadvantaged or marginalized by your program's work.

As you build your team, consider recent changes in partners, funding, local populations, government policies and other conservation efforts, and take into account existing commitments, policies and procedures the program must follow. You will need broad understanding of these opportunities, limitations and required processes to define your team and your program.

## Resource Chart

### Step 1.1: Team Composition and Stakeholder Analysis

#### Outputs

- Selection of program team and leadership
- Stakeholder analysis
- Informal or formal team agreement for program

#### Guidelines & Tools

- [Stakeholder Analysis \(G\)](#)
- [Define Program Team Composition and Operations \(G\)](#)
- [Mainstreaming WWF Principles on Indigenous Peoples and Conservation \(G\)](#)

#### Examples

- [Congo TRIDOM Landscape](#) (stakeholder analysis)
- [Terai Arc Landscape](#) (team composition and operations)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

## Tip:

Engage your team members in your program as early as possible, and work to keep them engaged through planning and implementation. Revisit the composition of your program planning team often and add new partners as necessary. Start considering who your donors (Step 3.2) need to be as your team moves through Steps 1 and 2. Proactively add new donors to your program team well before you begin implementation.

Once you have established your team, it will be engaged in every step of your program's planning and implementation cycle. As a first step, your team should execute a formal or informal agreement that outlines how members will work, make decisions, commit staff and resources, and engage other members. You should also agree on a rough timeline as you move through the next steps.

## Application to Large Programs

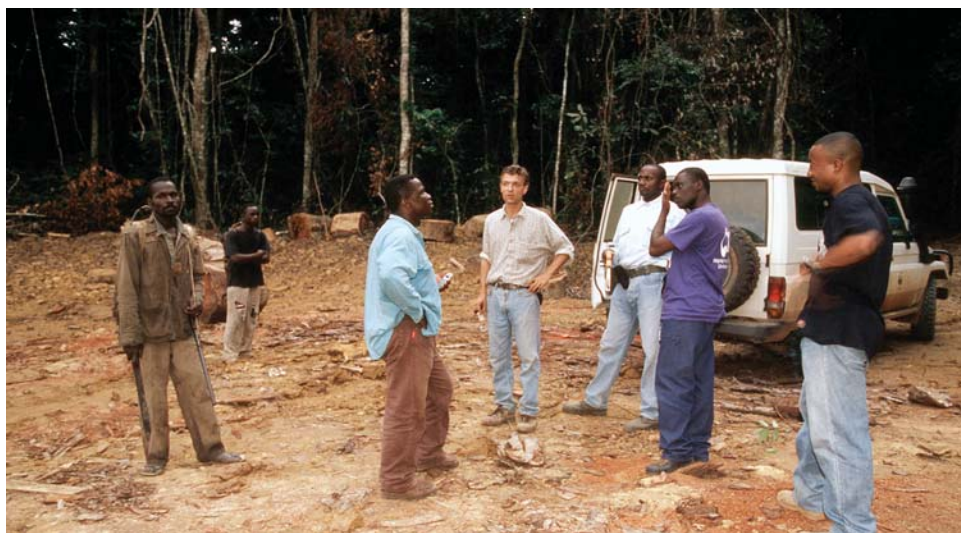
Large programs require significantly more resources and management than small programs, and may require a fairly large program team. Executing a formal or informal agreement that defines how the team will operate and share resources is critical.

You may want to consider having a “core team” or “executive committee” of a small number of the most involved partners to manage most program decision making and activities, using the larger team for involvement in the planning steps, validation, buy-in, and implementation support.

When engaging potential team members for large programs you should leverage existing coalitions. Recruiting team members who already work with one another can speed decision making and provide your program with more credibility and stronger networks.

Once members have been identified, your team should start thinking about how it might evolve through the planning process toward a more formal governance structure for your program's implementation. Multiple partner governance mechanisms for large programs are covered in Step 3.4.

Given the long-term nature of large programs, the individuals and organizations on your team will change over the lifetime of your program. Good programs continually seek and add new members, and your team should have an informal or formal process to review participation, add, and train new team members.



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## Example 1: Stakeholder Analysis for Congo TRIDOM Landscape

This program seeks to ensure long-term conservation within the Tri-National Dja-Odzala-Minkebe (TRIDOM) Landscape of the Congo Basin rain forest. This very large region covers parts of Cameroon, Congo and Gabon, and involves many public and private sector, NGO and local community stakeholders.

The TRIDOM team used the following matrix to assess potential stakeholder involvement. This approach helped the team leverage long-standing relationships between organizations. The example that follows shows 4 of the 16 stakeholder groups assessed in the overall analysis. For the full grid, see the TRIDOM example link in the Step 1.1 Resource Chart.

### TRIDOM Stakeholder Analysis

Stakeholder	Interest in or Relationship to Program	Resources Available	Potential Role
Ministry of Water and Forest (Cameroon, Congo, Gabon)	Primary program beneficiaries, and main decision makers for land use and forest management	Human resources at national and local levels, law enforcement, logistical resources	Crucial partner for implementation (development of rules, law enforcement)
Local indigenous populations (Baka pygmy)	Use part of the program zone forest for subsistence and participate in development of rules regarding use and access to resources	Deep expertise regarding forests	Adviser and participant in land-use planning
Logging companies operating (or willing to operate) in program area zone	Are increasingly interested in green image, and are under pressure to work toward “good forest management”	Financial resources, logistics, expertise, and influence on land-use planning	Partners in preventing use of logging roads for hunting or poaching
United States Agency for International Development	Engaged in supporting TRIDOM management	Financial support, technical assistance, and lobbying capacity	Technical adviser

## Example 2: Team Composition for Terai Arc Landscape

The Terai Arc Landscape (TAL) program in southern Nepal aims to restore degraded wildlife corridors for wildlife dispersal, curb illegal poaching, rehabilitate forests and watersheds, and support community forestry in a 25,000 km<sup>2</sup> area settled by 7 million people. The program requires extensive cooperation from the government of Nepal and numerous nongovernmental, community, private sector and donor organizations.

To address this challenge, a number of key stakeholder organizations organized into a TAL core team to lead planning and implementation. Several of these organizations had been working for years on sustainable development and biodiversity conservation in the region. The team has now expanded to 14 organizations, with Nepal’s Ministry of Forest and Soil Conservation as the lead. For further information on this team composition, see the TAL example link in the Step 1.1 Resource Chart.

## Step 1.2 Scope and Vision



### Overview

A program's scope is its broad geographic or thematic focus. A clear scope sets the rough boundaries for what the program will attempt to do. A program's scope often includes maps and a description of major ecological features.

A program's vision statement describes the ultimate desired state or condition that your program seeks to achieve within its scope. A well-formed vision statement should be visionary, ambitious and relatively brief.

Defining your vision statement is a process that combines scientific analysis, the desired social impact, and inspiration. A straightforward vision statement focuses your team on the most important challenges and provides the starting place for all subsequent management efforts (e.g. developing your strategies and implementing your program).

### Application to Large Programs

When scoping large programs, reliable geographic, political and biodiversity mapping is even more critical. For larger programs, your team may need to map existing protected areas, principal landscape and ecoregion boundaries, and key ecological features including all major biodiversity targets.

Larger programs can have an almost unlimited number of biodiversity targets (Step 1.3). Consult with the WWF-US Conservation Science Program or your organization's equivalent about the software required to manage the large amount of data associated with targets in your region.

Your team may also want to tap into resources and expertise available through universities or other partners to help with expensive and time-intensive mapping and GIS support.

Because the scoping will likely be carried out by staff or outside scientists, it is important to engage your team in the decision to prepare the scope and to get team members' final review and approval once it is completed.

#### Resource Chart

Step 1.2: Scope and Vision

#### Outputs

- Brief scope
- Vision statement
- Map and/or detailed spatial assessment if appropriate

#### Guidelines & Tools

- [Scope and Vision \(G\)](#)
- [Spatial Assessment for Terrestrial Ecoregions \(G\)](#)
- [Spatial Assessment for Freshwater Ecoregions \(G\)](#)

#### Examples

- [Mesoamerican Reef Ecoregion](#) (scope, vision & spatial assessment)
- [Klamath-Siskiyou Ecoregion](#) (spatial assessment)

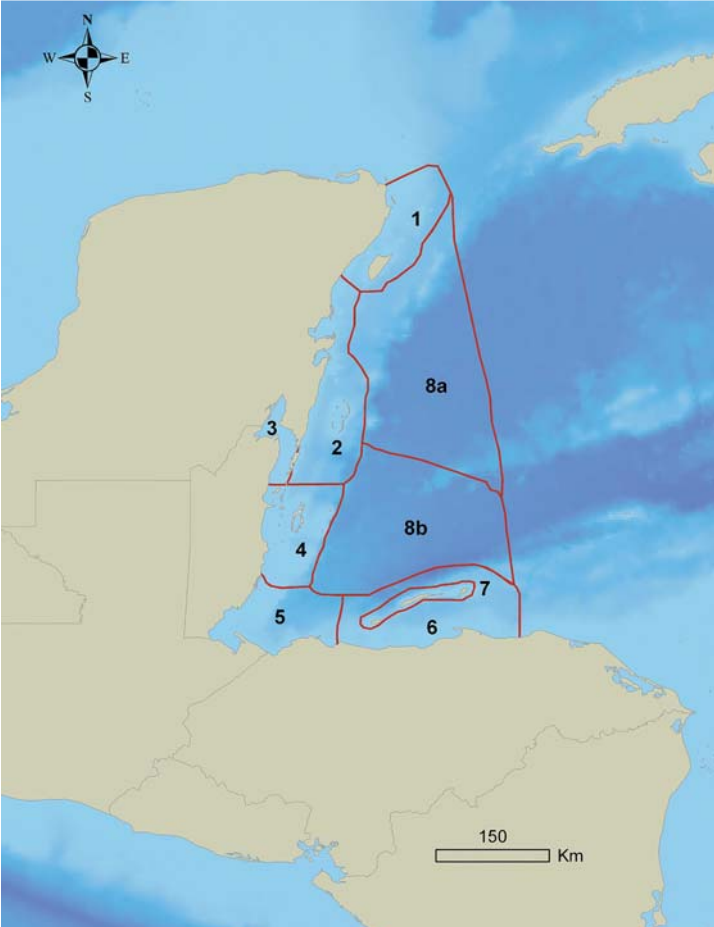
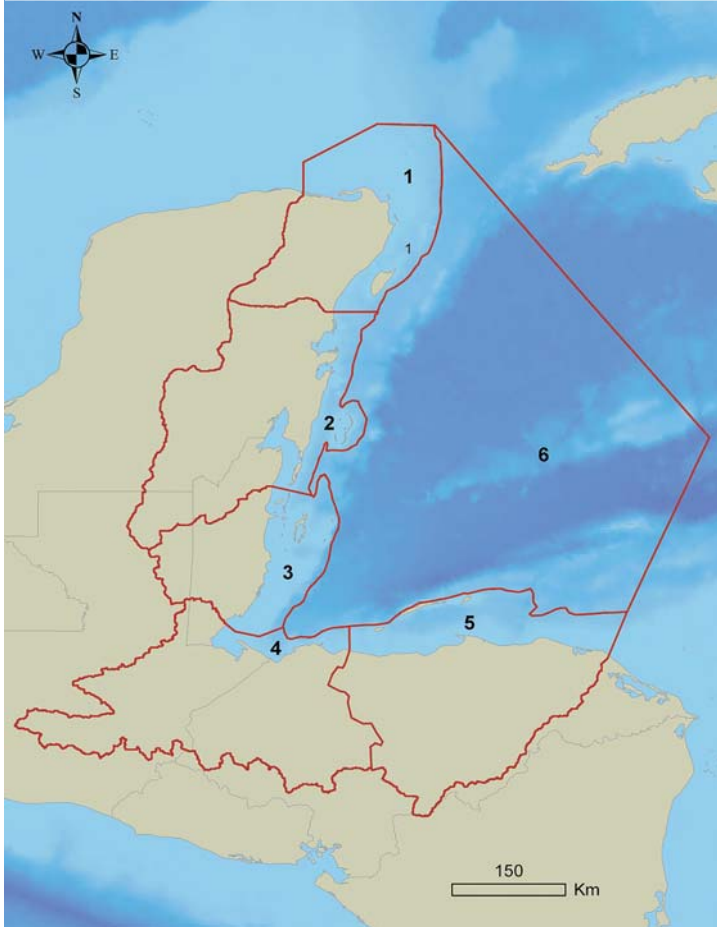
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If your program involves many partners, it is also particularly important that the vision statement be formally drafted, reviewed and approved as a group. This will help ensure team members’ support for program planning and implementation.

Large programs by nature involve balancing biodiversity goals with human needs and impacts. The vision statement for a large program should acknowledge the balance of conservation goals with ensuring sustainable livelihoods and other social goals.

Example 1: Scope and Vision Statement for Mesoamerican Reef Ecoregion

Long-Term Vision Statement	
To enhance the health of the Mesoamerican Reef’s diverse ecosystems and provide sustainable livelihoods for local people, while preserving one of the world’s greatest natural resources.	
Original Scope	Expanded Scope
The Mesoamerican Caribbean Reef marine ecoregion initiative initially defined its program area to focus on marine habitats composed of extensive coral reefs that support numerous endangered species.	Based on a rigorous threats assessment (Step 1.4), the scope of the Mesoamerican Reef (MAR) program was expanded to incorporate the watersheds of all rivers draining to the reef because they have a direct impact on the health of the reef. The result was the “ridge to reef” strategy, which is reflected in a revised set of maps and conservation strategies for this ecoregion.
	

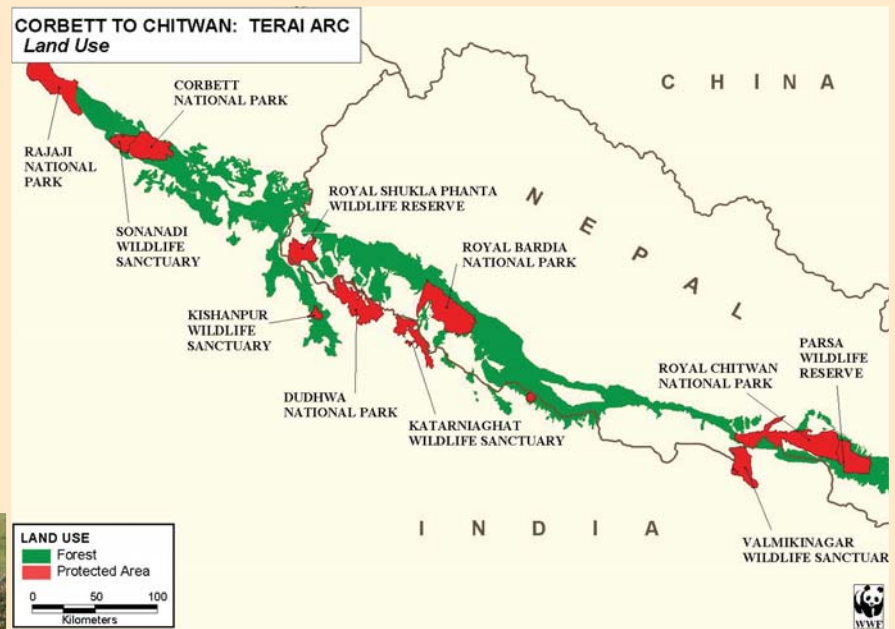
## Example 2: Scope and Vision for Terai Arc Landscape

### 50-Year Vision Statement

To conserve the biodiversity, forest, soils and watersheds of the Terai Arc Landscape (TAL) to ensure the ecological, economic and sociocultural integrity of the region.

### Scope

The TAL program vision will be achieved by reconnecting 11 protected areas through corridors (including three major Nepal-India transboundary corridors) into a single functioning landscape. Restoration of these areas will facilitate the dispersal and genetic exchange of wildlife populations and ensure the long-term survival of endangered species. The Terai Arc Landscape supports almost 7 million people in Nepal alone, and consists of government-managed forests, community forests, protected areas and buffer zones.





## Step 1.3 Targets



### Overview

Biodiversity targets (sometimes called focal conservation targets, or targets for short) are the biodiversity features of a place that a conservation program uses to focus actions and monitor progress. Targets can be species, groups of species, ecological systems such as habitats, or even ecological processes such as hydrology or pollination.

As your team carries out a full spatial assessment of your program area, you will identify a wide range of targets of interest in your region. Before you develop strategies and actions (in the next steps of these Standards), your team will identify a smaller set of strategic targets. Often, you can do both in the same process.

As you establish targets, you should also identify key ecological attributes (KEAs) to help measure the status of each target. These KEAs are aspects of the target's biology that if missing or altered, would lead to the loss of that target over time.

For example, the KEA for salmon might be the population size of salmon returning to a river to spawn. This attribute will become the basis for measures of the target's health.

### Application to Large Programs

Any larger program such as a landscape, ecoregion or larger, could yield dozens if not hundreds of potential targets. Therefore it is critical that your team be disciplined as it narrows this pool to have a limited number that can represent the entire assemblage of biodiversity at your site.

A good number to shoot for is 8 to 10 targets. You will then use these targets to plan your conservation strategies and monitoring. Narrowing and agreeing on this narrow set of strategic targets requires a careful blending of expert biological knowledge with managerial pragmatism.

#### Resource Chart

#### Step 1.3: Targets

#### Outputs

- Selection of a limited number of biodiversity or thematic targets
- A brief explanation of why each target was chosen
- Identification of key ecological attributes for each target

#### Guidelines & Tools

- [Targets \(G\)](#)

#### Examples

- [Bering Sea Ecoregion](#) (targets & key ecological attributes)
- [Terai Arc Landscape](#) (targets)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

# Tip:

Narrow your key targets to 8-10 that you will then use to define goals, strategies and results indicators under Step 2. The more targets your team chooses, the greater the detail (and work) in the steps that follow.

In carrying out your detailed spatial assessment, your team can make use of decision support software (such as MARXAN or C-PLAN) that can accommodate an almost unlimited number of targets. This maximizes the use of available information. The WWF-US Conservation Science Program or other local GIS specialists can assist you.

Your team will then select a limited number of strategic targets from this pool to represent the full suite of biodiversity in your program. Establishing clear strategic targets helps to identify the program's desired conservation results, focus actions toward these results, and develop monitoring indicators.

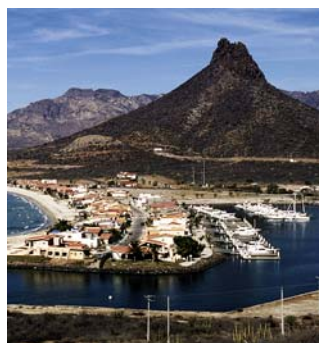
## Example 1: Biodiversity Targets for Bering Sea Ecoregion

The Bering Sea team originally identified 28 targets, which quickly proved too many for the program to focus on directly. Using a rigorous process, the team nested the original targets into a manageable nine targets intended to represent the full suite of biodiversity in the ecoregion. Each final target was chosen because its conservation will also conserve other important elements of biodiversity in the region. Three of the new targets are summarized in the following chart. For the full list, see the Bering Sea Ecoregion example link in the Step 1.3 Resource Chart.

### Bering Sea Ecoregion Targets

New Target (& Type)	Nested Targets	Conservation Importance	Key Ecological Attributes
Seabirds (group of species)	<ul style="list-style-type: none"> <li>• Cormorant</li> <li>• Kittiwake</li> <li>• Murre</li> </ul>	These species represent a wide range of other seabirds and forage fish because they each feed in a different area: cormorants near shore, kittiwakes at the shelf break, and murres over the shelf.	<ul style="list-style-type: none"> <li>• Combined long-term means (5-year rolling average) for productivity and population</li> </ul>
Southern Bering Sea Pinnipeds (group of species)	<ul style="list-style-type: none"> <li>• Northern Fur Seal</li> <li>• Stellar Sea Lion</li> <li>• Harbor Seal</li> </ul>	Conservation of these top level predators represents conservation of Bering Sea forage and pelagic fish populations.	<ul style="list-style-type: none"> <li>• Prey availability</li> <li>• Population size and dynamics</li> </ul>
Sea Ice Ecosystem (habitat)	<ul style="list-style-type: none"> <li>• Walrus</li> <li>• Polar bear</li> <li>• Bowhead whale</li> <li>• Beluga whale</li> <li>• Ringed, spotted, bearded, and ribbon seals</li> <li>• Spectacled eider</li> </ul>	This habitat supports many endangered species and helps regulate sea surface temperatures.	<ul style="list-style-type: none"> <li>• Prey availability</li> <li>• Sea ice habitat integrity</li> <li>• Population size and dynamics</li> </ul>

## Step 1.4 Context and Threats



### Overview

Context refers to the ecological, social, economic, political and institutional conditions that affect your program's biodiversity targets (Step 1.3). This step involves carrying out a thorough situation analysis to understand the context of your program. From this, you will be better positioned to design strategies and actions that will achieve your conservation vision.

Situation analysis involves first determining and ranking direct threats, and then looking at root causes behind these direct threats. Situation analysis often uses a graphical tool called a conceptual model that illustrates the relationships between biodiversity targets (targets), threats and interventions.

In short, a good situation analysis helps your team evaluate:

- Direct threats
- Indirect threats
- Enabling conditions
- Opportunities and other context

### Direct Threats Assessment and Ranking

A direct threats assessment is a formal exercise that identifies and ranks the conditions that degrade your targets. The ranking process focuses your program on the highest priority threats with the greatest urgency or likelihood of success.

This step offers two systems for ranking threats:

- Ranking each threat across all your targets ("relative" ranking);
- Ranking each threat on each individual target ("absolute" ranking)

Each system uses similar ranking criteria to prioritize threats. The relative ranking system is best used for initial estimations of threats, whereas the absolute ranking system is better for more detailed analyses.

#### Resource Chart

Step 1.4: Context and Threats

#### Outputs

- Identification of direct threats affecting each target
- A ranking of the direct threats
- Analysis of indirect threats and opportunities behind each direct threat

#### Guidelines & Tools

- [Situation Analysis \(G\)](#)
- [Conceptual Models \(G\)](#)
- [Threats Ranking \(G\)](#)

#### Examples

- [Bering Sea Ecoregion](#) (situation analysis, conceptual model & absolute threats ranking)
- [Mesoamerican Reef Ecoregion](#) (situation analysis, conceptual model & relative threats ranking)
- [Terai Arc Landscape](#) (root cause analysis)

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)



# Tips:

During the threats assessment, you may discover other threats or issues that require more analysis. Be sure to document these as part of your program's context even if you lack sufficient data to rank them, and include them as the focus of additional research or analysis.

The *process* of doing this analysis with your team is just as important—possibly more important—than the final product. This is because the process is what focuses your team on the most important targets, threats, and root causes in your program. If your team gets bogged down evaluating too many targets or threats, this process becomes compromised.

The criteria typically used in the *Relative* threats assessment include scope, severity, urgency and (optional) irreversibility:

- Scope refers to the proportion of the program area or target occurrence likely to be affected by a threat in a given time frame (e.g. the next 10 years)
- Severity attempts to quantify or categorize the level of damage to the target expected in the time frame
- Urgency refers to how soon a given threat will likely affect the targets
- Irreversibility reflects the ability or likelihood to reverse the impact of a given threat

The criteria typically used in the *Absolute* threats assessment include scope, severity and irreversibility. The impact of each threat on each target is rated on a score of 1 (low) to 4 (very high). These scores are either simply added or combined (using rule-based systems) to get an overall threat ranking.

## Application to Large Programs

Large conservation programs in general face a larger number of threats. Therefore, any threats analysis runs the risk of being overly complicated and confusing. Your team should try to limit analysis to the most important threats affecting the region.

Step 1.4 evaluates threats and (in the next section) indirect threats and root causes of threats. For larger programs, your team should rank your direct threats before tackling the more complex process of identifying root causes.

In a large program, it is also important to track the spatial dimension of where threats are occurring since in most cases they are not uniform over the region.

## Example 1: Spatial Occurrence of Threats in Bering Sea Ecoregion

The following maps illustrate the locations of two top threats to the biological targets in the Bering Sea Ecoregion. For the full set of maps, see the Bering Sea Ecoregion example link in the Step 1.4 Resource Chart.

**Areas of Bering Sea Ecoregion threatened by marine invasive species**



**Areas of Bering Sea Ecoregion threatened by polar bear hunting**



Bering Sea maps prepared by Randy Hagerstein of The Nature Conservancy.

## Example 2: Absolute Threat Ranking for Bering Sea Ecoregion

The Bering Sea Ecoregion team performed an absolute ranking of threats across each target to identify threats that optimize the cost-effectiveness of interventions. For this prioritization, three criteria were used: Scope of threat in the Bering Sea Ecoregion; Severity of threat by surface unit; and Irreversibility of threat.

The following table shows summary rankings for 5 of the 14 program-specific threats to the 3 of 9 biodiversity targets. It also calculates the overall threat rank by target according to compilation rules developed by The Nature Conservancy. Based on the analysis, climate change, lack of management data, excessive predation, oil spills and competition with fisheries are the threats on which the program should focus effort. For the full table, see the Bering Sea Ecoregion example link in the Step 1.4 Resource Chart.

### Bering Sea Threat Ranking

Biodiversity Targets Program-specific threats	Seabirds	Pinnipeds	Sea Ice Ecosystem	Overall Threat Rank
Climate change	High	High	Very High	Very High
Oil spills	High	Medium	Medium	High
Competition w/ fisheries	High	High	—	High
Introduced predators	High	—	—	Medium
Aquaculture	—	—	—	Low
Overall Threat Rank	High	High	High	Very High

## Example 3: Relative Threat Ranking for Gulf of California Ecoregion

The Gulf of California (GoC) Ecoregion team performed a relative ranking of all threats across all targets to identify threats that optimize the cost-effectiveness of interventions. For this prioritization, three criteria were used: Scope of threat in the GoC Ecoregion; Severity of threat by surface unit; and Urgency of threat. According to the analysis, artisanal fisheries, industrial fisheries and urban and tourist development are the threats with the greatest need for attention and the areas on which the program should focus effort.

### Gulf of California Relative Threat Ranking

Threat	Scope	Severity	Urgency	Total	Classification
Artisanal fisheries	10	7	10	27	Very High
Industrial fisheries	8	8	6	22	High
Urban/tourist development	5	10	9	24	High
Aquaculture expansion	4	9	8	21	Medium
Logging	3	3	3	9	Low

# Tip:

Root cause analysis offers a simple way to identify underlying indirect threats and causes to prepare a focused strategic plan. The conceptual diagram process is more time consuming, but more powerful because the diagram visually links indirect threats and root causes to direct threats and biodiversity targets.

## Indirect Threats, Root Causes and Opportunities Assessment

Once you have identified the direct threats, the next step for your team is to evaluate indirect threats and root causes of these indirect threats.

Root cause analysis identifies and explains the key factors that drive biodiversity loss, including those factors that interact in complex and not-so-obvious ways. These root causes can include indirect threats, opportunities and linkages to key stakeholders that influence threats and opportunities.

A useful tool to analyze the relationships among biodiversity targets, direct threats, indirect threats, opportunities and stakeholders is a conceptual model. You can also simply describe these linkages in writing, but your team would benefit from using the diagrammatic illustration derived from the conceptual model tool.

The conceptual model illustrates the cause and effect relationships among threats, opportunities and your program's targets. The model visually communicates your situation and the logic of your program's strategies and intended results to your team as well as to donors and other constituents.

A conceptual understanding of threats and enabling conditions is often well informed by the maps prepared in the spatial assessment. First, detailed maps allow you to visualize the distribution of threats across the program area. Second, a detailed threats map allows you to combine many threats (which can be weighted by severity or importance) into a combined multi-level threat map.

## Application to Large Programs

The greatest challenge in developing a good root cause analysis for a program of any size is to show enough detail to be useful for decision making, but not so much detail that your analysis becomes overwhelmingly complicated. This challenge is particularly acute in large programs as most encompass a larger area, more biodiversity targets, and more threats.

One solution to this challenge is to at least initially analyze the root causes behind each direct threat, rather than trying to think about all the threats at once. Your team can also limit the analysis to only those threats ranked "high" and "very high."



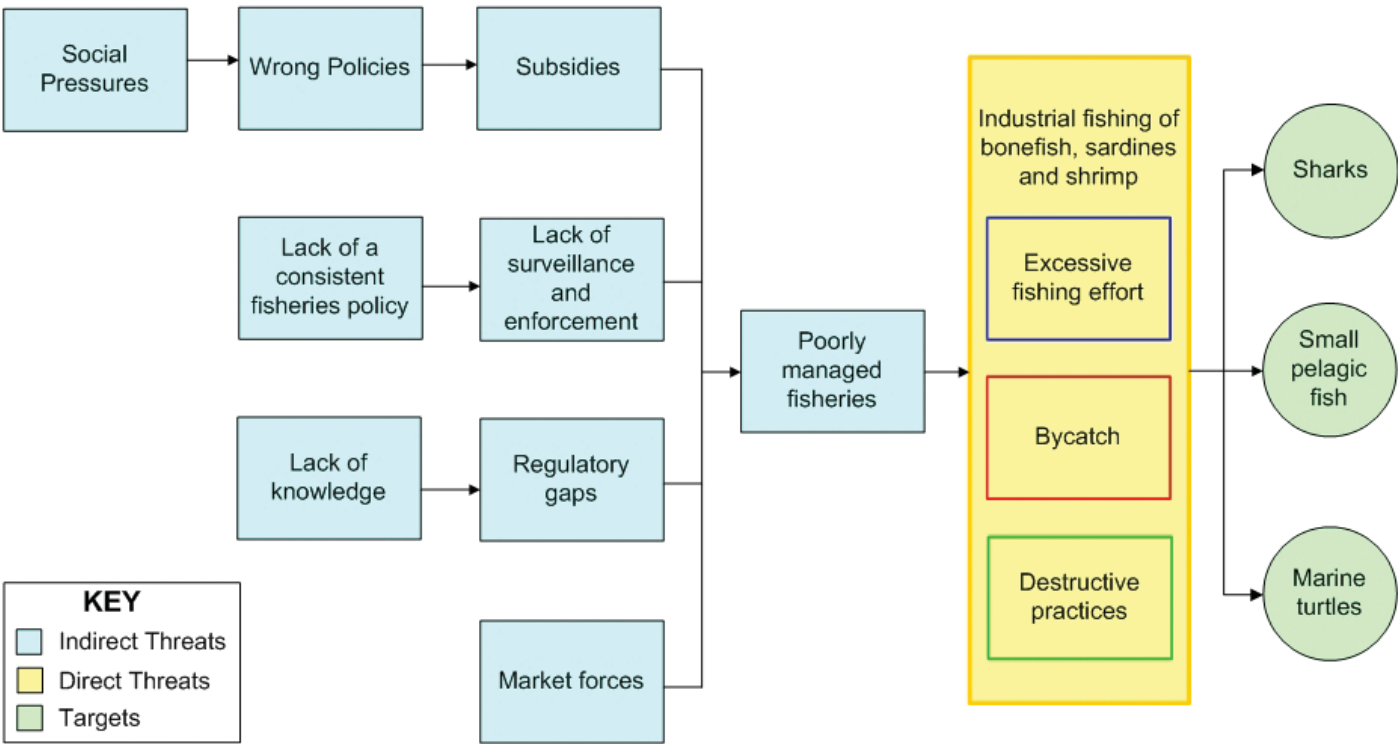
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Example 4: Indirect Threats Assessment for Gulf of California Ecoregion

The Gulf of California (GoC) conceptual model depicts linkages between indirect and direct threats to biodiversity targets in this ecosystem. The following excerpt illustrates several indirect and direct threats affecting shark, small pelagic fish, and marine turtle targets in the GoC.

Gulf of California Conceptual Model



Example 5: Root Cause Analysis for Terai Arc Landscape

A root cause analysis is an alternative to the conceptual diagram process that some conservation programs have successfully employed to identify direct and indirect threats.

For example, the Terai Arc Landscape (TAL) team used a participatory process among stakeholders to isolate the most significant forces affecting environmental degradation and biodiversity loss in the region. During this process, the team identified the following direct and indirect threats related to environmental degradation and biodiversity loss. These threats then became the basis for the TAL strategic and operational plans. For further information, see the TAL example link in the Step 1.4 Resource Chart.

TAL Direct and Indirect Threats Summary

Direct Threats	Indirect Threats
<ul style="list-style-type: none"><li>• Forest conversion</li><li>• Uncontrolled grazing in forests</li><li>• Unsustainable timber harvesting</li><li>• Unsustainable fuelwood extraction</li><li>• Forest fires</li><li>• Churia watershed degradation</li><li>• Wildlife poaching and human-wildlife conflict</li></ul>	<ul style="list-style-type: none"><li>• Population growth resulting from migration and natural causes</li><li>• Low agricultural productivity</li><li>• Struggle for land</li><li>• Lack of off-farm livelihood opportunities</li><li>• Inadequate forest resource access and management</li><li>• Cross-border issues</li></ul>

## STEP 2 Design

Once your team has described the scope, biodiversity targets, threats and context for your program, the next step is to design specific strategies you will undertake to conserve biodiversity within the program area.

The Design Step has three sections, all of which are tightly linked:

- *Action Plan* in which you set your program's strategies, goals, objectives and activities
- *Monitoring Plan* in which you will develop performance indicators to track target status and program progress
- *Operational Plan* that outlines how your program will develop the financial, human and other resources needed to implement over the long term

### Step 2.1 Action Plan: Strategies, Goals, Objectives and Activities



#### Overview

As your team moved through Steps 1.3 and 1.4, you began to identify potential strategies using your conceptual model and root causes (indirect threats) analyses. In this section you will test and clarify these strategies in the form of specific goals, objectives and activities you will use to achieve conservation results.

This process introduces increasing amounts of detail into your program planning, and allows your team to move from the broad program vision into implementation and monitoring. Each goal will have one or even several objectives. Each objective will have several activities.

Good action plans also include a timeline and specific outputs or deliverables for your activities—and identify parties responsible for carrying out activities. This detail gives your team the means to assign and manage financial needs, workplans and monitoring so the program planned will actually be carried out.

#### Goals

A goal is a formal statement that describes the future desired status of each biodiversity target (Step 1.3) over the term of your program. Each biodiversity target should have a numerical goal associated with it. It may help to map numerical goals that are applied to spatial attributes, for example ha or km<sup>2</sup> of key habitat types.



The goals you develop should meet the following “SMART” criteria:

- Specific
- Measurable
- Achievable
- Results-oriented
- Time-limited

To identify goals, your team will determine the desired long-term status of each target. Once you have summarized the status in a short sentence, your team should ensure each goal meets the SMART criteria.

A second, more formal method for developing goals is to use a process developed by The Nature Conservancy called Viability Analysis. In this process, your team can identify key ecological attributes (Step 1.3) for each target, and determine a status or progress indicator for each attribute.

## Objectives

An objective is a formal statement of how your program will affect a threat or opportunity. Objectives are outcome-oriented and are explicitly linked to threats or opportunities that affect one or more targets.

A single goal may have multiple objectives linked to it. The examples at the end of this section illustrate these linkages. As with goals, objectives should be SMART.

Your team should set objectives for each direct threat identified in Step 1.4. Your team can also set objectives for key indirect threats or opportunities that affect your threats.

For planning purposes, you may want to limit objectives to those threats ranked “very high” or “high.” Your team needs to make this judgment based on the capacity to implement your program (Step 2.3) and its likelihood of success.

## Activities

An activity is a specific action or task that members of your team will undertake to attain objectives. Each activity is explicitly linked to an objective. A good activity should be explicit and clearly stated so the responsible party knows exactly what is expected.

To determine activities, your team should systematically identify the actions required to reduce or eliminate each direct threat. This involves looking at all factors (root causes, indirect threats and opportunities) that influence your direct threats, and deciding to intervene on any factor offering substantial leverage to mitigate a direct threat.

### Resource Chart

Step 2.1: Action Plan - Strategies, Goals, Objectives and Activities

### Outputs

- Goals for key biodiversity targets
- Objectives for threats and opportunities
- Activities for all objectives
- Results chains or other description of assumptions
- Goals, objectives, and activities compiled in your action plan/logframe

### Guidelines & Tools

- [Action Plan \(G\)](#)
- [Results Chains \(G\)](#)
- [Logical Framework Analysis \(G\)](#)
- [WWF-NL Strategic Principles](#)
- [WWF-US Overarching Goal and Strategies](#)

### Examples

- [Mesoamerican Reef Ecoregion](#) (results chains & action plan)
- [Terai Arc Landscape](#) (logframe)

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

# Tip:

Preparing an action plan for large programs requires a certain level of negotiation with partners. It is very important that your program engage its partners in setting goals, objectives and activities that are acceptable to and feasible for all.

Results chains and logical framework analysis (logframe) are two commonly used tools for identifying activities. Both tools are helpful, but results chains more explicitly link actions, objectives and goals back to your threats and targets.

1. A results chain is a graphical representation of how your team believes your conservation strategies will lead to the attainment of your vision (Step 1.2). The “chain” depicted in this tool links goals to targets, objectives to direct and indirect threats, and explicit actions to each objective. This tool is used to test whether each proposed activity in a given strategy will produce the intended result. Results chains also clarify progress and status indicators for all goals and objectives.
2. A logframe summarizes and records your goals, objectives, activities, intended outcomes and monitoring indicators.

## Application to Large Programs

As you move through Step 2, your team will get into increasing levels of detail at the objective and activity level. It is critical in large programs that your team narrows your target selection (Step 1.3) to 8 to 10 or fewer, and uses your threats ranking (Step 1.4) to focus on the highest priority threats.

As highlighted in the box below, some large programs require goals, objectives and activities across multiple scales from local to national to global. This integrated approach requires program management, coordination and monitoring activities to be reflected in the action plan and in the operational plan (Step 2.3).

### WWF Organizational Design Principles and Directives

In the development of any Action Plan, it is important for your team to take into account any organizational principles or directives that you may need to adhere to. For example, within WWF, there are certain principles that guide our conservation work in some programs, such as: WWF-I principles for Network Initiatives and ecoregions; the WWF-US integrated local-to-global principle; and the WWF-NL Strategic Principles.

The WWF-NL Strategic Principles are emerging into greater usage in the Network and offer a coherent set of practices for the planning and management of larger programs. The seven linked principles include:

1. **Vertical Integration**, to link local, regional, national and global initiatives
2. Identification of **Conservation Change Mechanisms**
3. Engagement of one or more **Strategic Conservation Partners**
4. Development of a broad **Implementation Coalition** of many partners
5. Initiation of the program through discrete **Project Models**
6. **Wide-spread Adoption** (or Magnification) of the program
7. An **Exit Strategy** once sustainability is achieved

The WWF-US organizational principle is virtually identical to the above concept of Vertical Integration. This is a highly-integrated approach that addresses major drivers of change (constituting threats as well as opportunities) from different sectors and involving a wide range of stakeholders at local, national, regional and global levels.



## Example 1: Goals, Results Chain and Action Plan for Gulf of California Ecoregion

The following are four of seven goals that the Gulf of California (GoC) team identified for the program's biodiversity targets; one of fifteen strategies; and the results chain associated with that strategy.

### Gulf of California Program Goals

**Reefs and rocky bottoms**—20 years from the beginning of the program, the observed values of diversity and abundance of representative fish and benthic organisms (bass, lobster, octopus, sea cucumber) at reefs and rocky bottoms of priority sites in the GoC are not significantly different from baseline levels.

**Small pelagic fish**—20 years from the beginning of the program, the (mean) biomass of small pelagic fishes in the GoC is kept at a minimum of 400,000 tons, allowing its renewal, commercial exploitation, and use as food for other species.

**Marine turtles**—in 20 years there will be a 10 percent increase in the survival of leatherback and green turtles in the GoC as compared to levels in 2005.

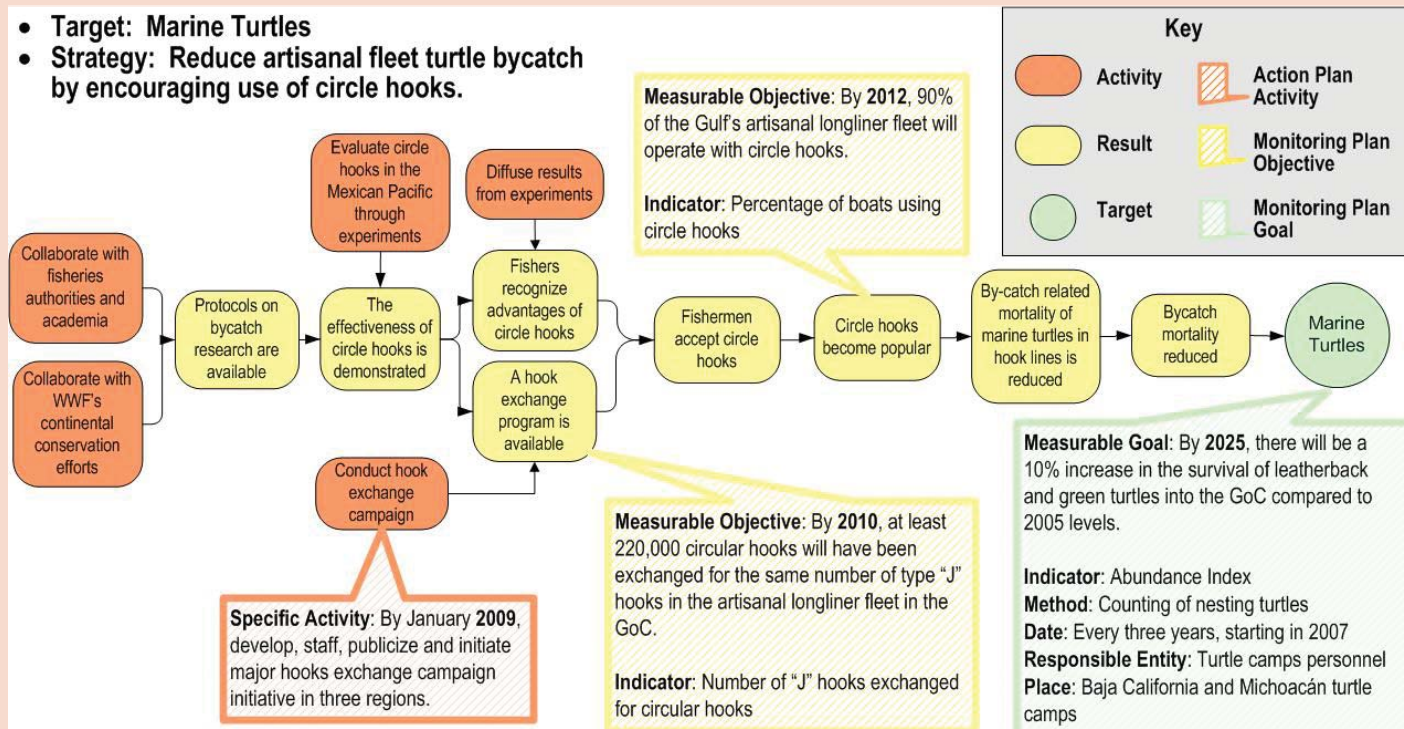
**Sharks**—in 20 years the abundance of the four main species of pelagic sharks caught in the GoC (*Alopias pelagicus*, *Carcharhinus falciformis*, *Sphyrna lewini*, and *Sphyrna zygaena*) will be 20 percent more than values in 1998.

### Gulf of California Strategy 2.1: Reduction of marine turtle bycatch.

Bycatch in the artisanal fleet has been one of the main factors causing marine turtles (mainly leatherback and green) to become almost extinct in the Pacific. This strategy is based on demonstrated effectiveness of circle hooks, communication of results among fishermen, an exchange program of "J" hooks for circle hooks, and introduction of their daily use.

### Gulf of California Results Chain for Strategy 2.1

The program team used results chains like the one below to identify 15 strategies the program will pursue. These results chains helped produce detailed activities and measurable objectives, a few of which are highlighted below.



## Example 2: Logical Framework Analysis for Terai Arc Landscape

The Terai Arc Landscape (TAL) team used a logical framework (logframe) to summarize goals, objectives, activities, indicators, means of verification and assumptions for its program. The following chart represents part of this logframe, although most details were added purely for illustration. For the actual logframe, see the TAL example link in the Step 2.1 Resource Chart.

### Terai Arc Landscape Logframe

<b>Goal 2</b> Restoration and effective management of 764,000 ha of TAL forest by 2014.			
<b>Objective 2.1</b> Support sustainable community forestry plantation by local households through training and technical assistance by 2012.			
Activity	Measurable Indicator	Means of Verification	Assumptions
<b>Activity 2.2.1:</b> Provide technical and financial support to Community Forest User Groups (CFUGs) and Community Forest Management Groups (CFMGs) by 2010 to reduce forest degradation.	<b>Ind. 2.1.A:</b> Number of TAL households actively participating (in the past 6 months) in community forestry training program.	<b>Data Source:</b> Forest user group database <b>Data Collection Method:</b> Request from government <b>Geographic Scope:</b> TAL forest areas, townships, buffer zones, and corridors <b>Frequency:</b> Semiannually <b>Responsibility:</b> WWF-Nepal	Locals are willing to participate in education and training sessions.
	<b>Ind. 2.1.B:</b> Total number of ha of forest being managed by CFUGs and CFMGs.	<b>Data Source:</b> Forest field report <b>Data Collection Method:</b> Request from government <b>Geographic Scope:</b> TAL forest areas <b>Frequency:</b> Semiannually <b>Responsibility:</b> WWF-Nepal	Land reform program is in place.

## Step 2.2 Monitoring Plan



### Overview

This step gives your team a set of monitoring indicators for each goal, objective and activity set in your action plan. You will also develop a process for gathering and assessing data for each of your indicators.

A good indicator has several factors that your team should consider in setting up a monitoring plan. Indicators must be precise, measurable, consistent and unchanging over time, but also sensitive and responsive to changes in the condition being measured.

Each indicator may require different collection and analysis methods. The method you choose for a given indicator needs to be accurate and reliable, but also feasible and cost-effective. A key point is that the most expensive methods are not always the best.

In general, you want to collect the least amount of information that will allow you to know the status of your biodiversity targets, threats and actions, and enable your team to make sound management decisions. In practice, you will need to prioritize which biological, threat-related, financial or activity-based indicators to track based on costs and benefits.

As you prioritize and lay out your monitoring plan, it is recommended that most of your investment go toward monitoring goals and objectives. This information will tell you the most about the status of your biodiversity targets and threats.

Monitoring plans should list each indicator along with how, where (spatial scale and location) and when (time frame and frequency) it will be collected. The plan should also describe how and by whom data will be collected, stored and analyzed.

A complete monitoring plan should also outline how you will collect baseline data (against which all subsequent data will be measured), intermediate and final desired results, monitoring costs and funding sources for monitoring (if known).

The details in your action plan will set you up for your monitoring plan. If your goals and objectives meet all the criteria, and you have explicit results chains or a logframe, your indicators should come directly from this work.

## Application to Large Programs

For large programs with time frames that can range from 20 to 50 years, it is important to track progress toward long-term goals and objectives at regular intervals. Your team members, the government and donors need to know your status and results over time.

Long-term change, especially in large, complex programs occurs slowly, so your team, donors, partners and other stakeholders should be realistic about when change can be expected. You will need to carefully manage expectations—especially with respect to donors, who very often desire evidence of short-term results.

You will likely see progress fairly quickly for shorter-term objectives addressing indirect threats or opportunities. You may see results related to your biodiversity targets (via goals) and threats (via objectives)—but you need to confirm that changes are due to your program rather than unrelated events or forces.

### Resource Chart

#### Step 2.2: Monitoring Plan

#### Outputs

- Indicators to track progress of each goal, objective, and activity
- Brief descriptions of methods to collect data for each indicator
- When, where, and by whom each kind of data will be collected
- Description of how data will be stored and analyzed

#### Guidelines & Tools

- [Monitoring Plan](#) (G)

#### Examples

- [Mesoamerican Reef Ecoregion](#) (biological & goal/objective-based activity monitoring)
- [Terai Arc Landscape](#) (partner activity monitoring)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

## Tips:

Your team should develop a monitoring plan at the same time you develop your action plan (Step 2.1) and your operations plan (Step 2.3). The actions and indicators you derive are the basis for the budget or financial model developed in Step 2.3.

Carefully estimate the full cost of collecting baseline data, which is often much higher than periodic sampling costs required later. Include baseline and all monitoring costs in your financial model.



Given the number of partners and activities in large programs, it is especially important to assign accountability for work and results. Your monitoring plan, once formally endorsed by team members, should be carried out and periodically reviewed by a subset of team members within a formal partner governance structure (Step 3.4).

## Example 1: Monitoring Plan for Gulf of California Ecoregion

The following excerpt from the Gulf of California (GoC) monitoring plan illustrates monitoring details for both goals (target-focused) and objectives (threat-focused) for the circle hook strategy highlighted in Step 2.1, Example 1.

### Gulf of California Monitoring Plan

<b>Target</b>	Marine Turtles (leatherback and green turtles)			
<b>Strategy</b>	Reduce marine turtle bycatch.			
<b>Goal</b>	In 20 years, there will be a 10% increase in the survival of leatherback and green turtles into the GoC compared to 2005 levels.			
<b>Indicator</b>	<b>Method</b>	<b>Date</b>	<b>Responsible Entity</b>	<b>Place</b>
Abundance Index	Counting of nesting turtles	Every three years, starting in 2007	Turtle camps personnel	Baja California Sur and Michoacán turtle camps
<b>Objective 1</b>	By 2009, we will have a proven method to significantly reduce marine turtle bycatch from the artisanal longliner fleets from 12 locations on the Mexican Pacific.			
<b>Indicator</b>	<b>Method</b>	<b>Date</b>	<b>Responsible Entity</b>	<b>Place</b>
Bycatch rates of marine turtle	Evaluation trials on board artisanal fleet	2005-2008	WWF GCP	12 locations
<b>Objective 2</b>	By 2010, at least 220,000 circular hooks will have been exchanged for the same number of type “J” hooks in the artisanal longliner fleets in the GoC.			
<b>Indicator</b>	<b>Method</b>	<b>Date</b>	<b>Responsible Entity</b>	<b>Place</b>
Number of “J” hooks exchanged for circle hooks	Regional hook exchange program	Starting in 2010	WWF GCP	GoC
<b>Objective 3</b>	By 2012, 90% of the artisanal longline fleet of the GoC will operate with circle hooks.			
<b>Indicator</b>	<b>Method</b>	<b>Date</b>	<b>Responsible Entity</b>	<b>Place</b>
Percentage of boats using circle hooks	Inspection of the fleet	Starting in 2010	WWF GCP	San Felipe, Puerto Peñasco, Mazatlán

## Step 2.3 Operational Plan



An operational plan summarizes the financial, human, and other resources necessary to implement activities and monitoring for your program. It identifies where those resources will come from, and the major risks associated with implementation of your program.

A good operational plan will typically include these four components:

- Capacity assessment of human and other resources
- Comprehensive financial model reflecting costs and revenues
- Risk assessment and mitigation plan
- Project lifespan and exit strategy

The size of your program will dictate how many of these steps your team needs to address. Smaller, short-term projects with good action and monitoring plans can quickly assess capacity needs or risks, and move quickly to developing one- to three-year workplans, budgets and proposals under Step 3.

Larger and more complex programs should carry out a rigorous examination of capacity and resource needs for implementation. As your team scales up to larger conservation work that entails many years, it is critical to quantify all needs in a comprehensive financial model that projects long-term costs and sustainable funding requirements.

### Human and Other Capacity Requirements

The term “capacity” refers to all elements needed for your program to scale up and deliver results. This step examines human, financial, network and other capabilities that are important factors in your success.

The simple assessment tool used in this step will help your team evaluate your program capacity needs prior to implementation. The tool will help you determine to what extent those capacities already exist and simply need to be engaged, and to what extent you will have to fund those capacities or find them in other places.

#### Resource Chart

Step 2.3: Operational Plan

#### Outputs

- Estimates of capacity needs and gaps required to implement your project

#### Guidelines & Tools

- [Operational Plan](#) (G)
- [Program Capacity Assessment Template](#) (T)

#### Examples

- [Bering Sea Ecoregion](#) (capacity assessment)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

# Tip:

In the process of creating your action and monitoring plans (Steps 2.1 and 2.2), it is wise to devote some time to beginning the capacity assessment process while your objectives, activities and monitoring needs are fresh in your team members' minds.

The capacity assessment tool is based on a popular method used in the private sector known as the 7-S Framework (developed by McKinsey). The 7-S Framework focuses on seven areas of capacity: shared goals and values, strategies, style, skills, staff, systems and structures.

Because WWF and conservation programs attributes differ from those of the typical private sector enterprise, we have modified the 7-S Framework into the following categories:

- Skills (organizational and individual)
- Systems (processes, policies and procedures such as HR, IT, F&A and Ops)
- Management structure and style
- Program partners
- Network (WWF) and program governance
- Resources (funding & in-kind)
- Power and influence

## Application to Large Programs

Because of the dependency of large programs on multiple partners, your team should consider carrying out a capacity assessment as a three-step process:

1. Identify and review the capacities needed to carry out your program, and where gaps might exist.
2. Review which capacities each partner organization can bring to the overall program.
3. Consolidate this information to review which capacities exist across all partners, which capacity gaps still exist, and how you will fill these gaps.

The costs of building and maintaining your program's overall capacity should be built into your financial model (Step 2.3 Financial Requirements), budgets (Step 3.1), and sustainable funding plan and proposals (Step 3.2), so the resources needed to address capacity shortfalls can be secured.

## Example 1: Capacity Assessment for Bering Sea Ecoregion

Using the WWF capacity assessment tool, WWF's marine team staff conducted a capacity assessment that covered bycatch reduction and fishery certification initiatives. The following chart summarizes two of the seven types of program capacity that the team assessed. For the full capacity assessment, see the Bering Sea example link in the Step 2.3 Capacity Requirements Resource Chart.

Type of Capacity	Key Considerations	Currently Used Capacity	Untapped Existing Capacity	Capacity Gap	Priority (H/M/L)	Recommended Solution
1. Skills (both staff & institutional)	<ul style="list-style-type: none"> <li>• Technical skills (science, policy, etc.)</li> <li>• Process skills (planning, fund-raising, etc.)</li> </ul>	Fisheries science and management strong in US and Russia	Expertise on bycatch mitigation is available in wider WWF-Network	Ability to influence EU markets for products from Western Bering	High	<p>Bering Sea Ecoregion Coordinator to reach out to WWF Network to get bycatch mitigation help</p> <p>Network or WWF Europe office need to be engaged to help influence EU-based companies, wholesalers, and markets</p>
2. Systems	<ul style="list-style-type: none"> <li>• IT, HR, F&amp;A, etc.</li> <li>• Procedures</li> </ul>	Contracting and oversight of grants is a strength	Global communications systems to highlight bycatch initiatives	Decentralization of systems to field offices, especially F&A	Medium	<p>Network communications staff need to be engaged in work in Bering</p> <p>WWF-US and Network F&amp;A depts will establish stronger F&amp;A capacity and authority in field offices</p>



## Financial Resource Requirements

A comprehensive financial plan (or financial model) aggregates the costs associated with implementing your action plan and monitoring plan over the life of the program. It also includes other programwide costs, such as research, management, capacity building, risk mitigation and concluding (exiting) the program.

The financial model also incorporates potential sources of revenue—both financial and in-kind—over the life of the program. From this, you can model both available funding and funding gaps for any dimension of your program.

The total costs, revenue estimates, and the gap analysis derived from the model will give your team a strong basis from which to develop sustainable funding vehicles and other fund-raising proposals (Step 3.3).

A financial model can provide the following benefits to your team:

- Present your program's overall context, goals, objectives and actions in clear financial terms for securing funders and partners
- Provide program costs, funding gaps and revenue targets as a basis for your sustainable funding plan
- Provide the information needed for longer-term cost projections, program budgeting and resource allocation decisions
- Present scenarios based on changing cost, revenue, and other key assumptions. This will, in turn, prepare you to adjust your program depending on the resources you can attain.

## Application to Large Programs

For larger programs that have large and complex budgets, greater fund-raising needs, and multiple partners and funding sources, a comprehensive financial model is the centerpiece of your operational plan.

The process of assigning costs to specific objectives and activities while building the model will help test and validate your action plan and activities. The process of building the model can also help you evaluate scenarios of likely events.

The model's data provide the basis for developing activity and financial performance indicators for tracking progress. For example, you can compare costs estimated to undertake activities within the model with actual implementation costs. You can also track activity progress by comparing planned versus completed units over time.

Note that you can start developing your financial model once activities have been compiled in your action plan (Step 2.1). It may be easier to develop the model along with your monitoring plan (Step 2.2), and while considering your program's capacity requirements (Step 2.3 Capacity Requirements). You should also incorporate the cost of risk mitigation and exit strategy activities from Steps 2.3 Risk Assessment and 2.3 Exit Strategy into your model.

### Resource Chart

Step 2.3: Operational Plan

### Outputs

- Estimates and analysis of financial resources required to implement your project

### Guidelines & Tools

- [Operational Plan](#) (G)
- [Single Protected Area Financial Model Template](#) (T)

### Examples

- [Mesoamerican Reef Ecoregion](#)
- [Terai Arc Landscape](#)
- [Amazon Region Protected Areas](#)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

## Tips:

A financial model is not a budget. Models use extrapolated cost and revenue estimates to forecast long-term financial conditions and needs that do not usually match annual operating budgets or accounting line items. For guidance on short-term program budgeting and links to WWF budget templates, see Step 3.1.

Be realistic in predicting future revenue streams in your model. Avoid optimistic or uncertain estimates of grants or other revenue streams, especially from user fees, ecotourism, or other conservation-supporting industries that are untested in many parts of the world.

## Example 2: Operational and Financial Plans for Terai Arc Landscape

To implement the Terai Arc Landscape (TAL) Strategic Action Plan, the government of Nepal formally adopted an operational plan that:

- Builds the means of implementation for the TAL Strategic Plan;
- Creates a program management structure for over 10 active partners in the landscape;
- Presents costs for all strategies and activities over 10 years;
- Provides detailed cost, revenue, partner contributions and gap analysis to support management and decision making;
- Includes a monitoring function to track financial and activity indicators;
- Supports efforts to attract new program donors and partners.

The centerpiece of the TAL operational plan is a financial model that calculates costs based on unit costs for each activity, and totals them by country district, by activity groups, and by strategies as shown below. For the full financial model, see the TAL example link in the Step 2.3 Financial Requirements Resource Chart.

### Terai Arc Landscape Total 10-Year Activity Expenses for Single District ('000 Nepali Rupees)

ID #	STRATEGY/Activity Group/Activity	Unit	Unit Cost	# Units	Total Cost
<b>2</b>	<b>SUSTAINABLE FOREST MANAGEMENT</b>				<b>378,360</b>
<b>2.1</b>	<b>Restore degraded forest</b>				<b>297,633</b>
2.1.1	Plantation by government agencies	Hectare	17	5,539	94,159
2.1.2	Plantation by communities	Hectare	17	6,391	108,645
2.1.3	Natural regeneration	Hectare	3	29,824	89,473
2.1.4	Private plantation	Hectare	4	593	2,373
2.1.5	Restoration at leasehold forest land	Hectare	3	852	2,982

Based on a comparison between total costs and revenues, the TAL financial model projected the following funding needs and gaps by strategy over 10 years. This information helps managers solicit funds from new donors and allocate funds to areas of greatest need. For the full model overview and operational plan, see the TAL example link in the Step 2.3 Financial Requirements Resource Chart.

### Terai Arc Landscape 10-Year Financial Gap Summary

Strategy	Million US Dollars		
	Required	Committed	Gap
Governance	2.6	6.1	(3.5)
Soil Conservation and Churia Watershed Management	25.7	2.1	23.6
Species and Biodiversity Conservation	36.3	9.2	27.1
Sustainable Livelihoods	40.1	10.6	29.5
Sustainable Forest Management	43.2	8.4	34.8
<b>Subtotal (Programmatic)</b>	<b>\$147.9</b>	<b>\$36.4</b>	<b>\$111.5</b>
Monitoring	7.4	0.3	7.1
Project Management	29.6	3.8	25.8
<b>Total</b>	<b>\$184.9</b>	<b>\$40.5</b>	<b>\$144.4</b>

### Example 3: Financial Plan for Mesoamerican Reef Ecoregion

The Mesoamerican Reef (MAR) Protected Area (PA) network developed a financial plan that included:

- An assessment of capacity needs for creation and growth of 63 marine and coastal PAs; and
- Completion of a 10-year comprehensive financial model for the PAs.

The next step of this process, now under way, entails development of a sustainable funding plan and campaign for the PAs based on the financial model gap analysis.

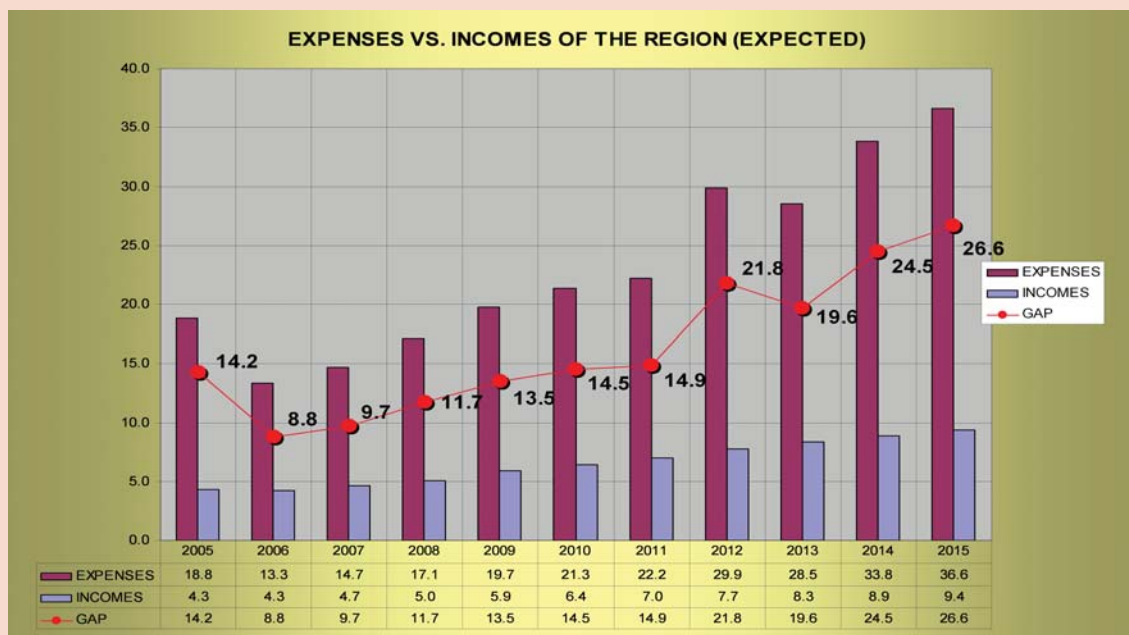
#### Gap Sensitivity by Country by Year

The MAR financial model presents costs and revenue for PAs in each country and a gap analysis for each PA and for each country. It includes extensive sensitivity and gap analysis capability (physical contingency, price contingency, inflation, optimistic/expected/pessimistic scenarios).



#### Total Annual MAR Expenses, Revenue and Gaps by Year

The model represents four countries (Belize, Guatemala, Honduras and Mexico), and projects the costs of creating, consolidating and attaining full management of all 63 PAs over 10 years.





**Resource Chart**

Step 2.3: Operational Plan

**Outputs**

- An assessment of potential risks and specific mitigation strategies

**Guidelines & Tools**

- [Operational Plan](#) (G)
- [Risk Ranking and Mitigation Template](#) (T)

**Examples**

- [Congo TRIDOM Landscape](#)
- [South Africa](#)

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## Risk Assessment and Mitigation Strategy

A risk assessment is used to determine the various risks associated with your program and to help your team develop mitigation strategies. Mitigation strategies should be integrated into implementation as early as possible, allowing many risks to be anticipated and minimized prior to having a major impact on your program.

Your team can identify specific risks related to your program in a relatively short, informal meeting. The list of questions in the Risk Ranking and Mitigation Template provides a starting point for your team's discussion. In this process, the team should document all significant risks, including any that may not be covered by the list of questions.

The next step is to individually rank each risk identified during the assessment process. The team should rank each risk according to both its likelihood (the likelihood of occurring over the life of the program) and its severity (the extent to which it would affect the program's ability to achieve goals and objectives).

Once the assessment and ranking are complete, your team should identify a mitigation strategy for each serious risk. In addition to individual mitigation strategies, your team should identify the parties responsible for both tracking each risk and carrying out each mitigation strategy.

## Application to Large Programs

Although risk is common across any scale of conservation program, the number and relative impact of certain risks will increase with the size and complexity of a program. Larger programs often involve multiple countries, which creates a unique set of potential problems associated with political and economic support and stability.

For this reason, your team should assess, and plan to mitigate the political, economic and other risks that could impact achievement of your program vision. This could include developing strong, solid alliances with partners in each country participating in your program.

The assessment process and development of mitigation strategies should be conducted as early as possible during your program design phase (Step 2). The assessment, ranking and mitigation strategies should be reviewed and updated regularly by the program manager, steering committee and workgroup.

## Tip:

For large programs, formally recognizing risks is not enough. Managers must set priorities among them and actively pursue mitigation strategies for those that are most threatening. Experience has shown that the costs of not pursuing mitigation strategies can be substantial, and may fully undermine a program.

## Example 4: Risk Assessment, Prioritization, and Mitigation for Congo TRIDOM Landscape

The extensive financial, partner and political risks the Congo TRIDOM Landscape program encounters are typical of those faced by large conservation programs. The TRIDOM team used a matrix to assess, rank and develop mitigation strategies for 11 key risks, 4 of which are displayed in the following table. For the full risk ranking and mitigation strategy grid, see the TRIDOM example link in the Step 2.3 Risk Assessment Resource Chart.

Risk	Risk Ranking	Risk Mitigation Strategy
Logging companies not willing to contribute significantly to cost of hunting surveillance in their concessions	High	<ul style="list-style-type: none"> <li>• Work with logging industry federations toward adoption of clear standards for hunting management and ways to obtain their support.</li> <li>• Fine logging companies for poaching that benefits from their logging roads or vehicles.</li> <li>• Split operations cost of mobile antipoaching units among several logging companies.</li> </ul>
Insufficient support for law enforcement (against heavy poaching in particular)	Medium	<ul style="list-style-type: none"> <li>• Adopt and implement law enforcement strategy that does not hurt basic legitimate interests of the majority of hunters and resource users.</li> <li>• Involve administrative, military, political, and judiciary authorities.</li> </ul>
Deteriorating political and economic conditions	Low	<ul style="list-style-type: none"> <li>• Continue basic conservation activities, even in times of conflict. Experience in the Congo Basin (Democratic Republic of Congo, Congo Brazzaville) has shown that this is feasible and can produce good results.</li> </ul>

## Sustainability, Project Lifespan, and Exit Strategy

An important component of the operational plan is your program's sustainability. Sustainability refers to the ability of a program to deliver ongoing benefits after the main part of external support has been completed.

To achieve sustainability, conservation programs initiated by international organizations may require a robust exit strategy. An exit strategy encompasses activities that describe how you will phase out of a program or activity over the long term in a responsible way.

Going forward, an exit strategy should specify:

- Estimated program life span and timing of major phases (Steps 1.2 and 2.1)
- Strategies and activities that should and should not be continued (Steps 2.1 and 4.4)
- Sources of sustainable financing required for program activities (Steps 2.3 and 3.2)
- Organizations and individuals that will provide expertise, equipment and infrastructure to manage and implement activities (Steps 2.3 and 3.3)
- Strategic partners or communities who will ensure long-term ownership of program activities and results (Step 3.4)

Once you have detailed which organizations will continue to manage and implement program activities into the future, it is important to set expectations with all partners about what will happen during each program phase.

**Resource Chart**

Step 2.3: Operational Plan

**Outputs**

- An exit strategy, if appropriate

**Guidelines & Tools**

- [Operational Plan](#) (G)

**Examples**

- See *Operational Plan* Guidance for short examples

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

**Application to Large Programs**

Given the long-term commitment required, many large programs are involved in their conservation sites for an indefinite period. Often in such cases, a program team plans to change its role from implementer to facilitator, with local governments or community organizations assuming primary responsibility for implementing activities.

It is particularly important that large programs clarify long-term expectations with partners, stakeholders and individual staff members early in the planning process. Your team should determine the right time to shift roles or exit based on clear program criteria, rather than rigidly fixing a date.

**Example 5: Exit Strategy for Terai Arc Landscape**

The Terai Arc Landscape (TAL) program is based on a 50-year vision, and many international partner NGOs are working in the region indefinitely. To ensure long-term government buy-in and support, a coalition of these partners successfully handed off ownership of this program to the government of Nepal, which officially endorsed the TAL Strategic Plan and Operational Plan in 2005 and 2006.

**Terai Arc Landscape Community Forest Management**

A significant element of the handoff strategy is empowering local communities to manage forest resources as part of their daily activities. By the end of the 10-year period, program partners expect most conservation and development programs to be managed by local communities.

**Tip:**

Keep in mind that getting large programs up and running is a major challenge, but sustaining activities is also difficult. It is important to discuss implications of an exit, including expectations for each main activity; and allow time to scale down activities as appropriate.



# STEP 3 Implement

In the previous steps of the program cycle, your team developed action, monitoring and operational plans. In the Implement Step, you need to turn these general plans into action. This step involves:

- Developing and executing specific workplans and budgets
- Ensuring sufficient long-term fund-raising and sustainable financing for your program
- Building the capacity necessary to deliver results
- Instituting strong partner management to implement activities

As with previous steps, all of these elements are highly interlinked and most program teams go through them as an iterative process. You should change the order as your team sees fit, and revisit earlier elements at any time.

## Step 3.1 Workplans and Budgets



### Overview

In this step, your team will begin turning your plans into reality through short-term workplans, budgets, fund-raising, and partner coordination and management.

Workplans and budgets are the building blocks of program implementation. Workplans derive from your action, monitoring, and operational plans, and specify the following:

- Specific tasks required to complete each planned activity
- Parties responsible for completing each task
- Timing and deadlines for completing each task
- Sequence of linked tasks that follow after each task is completed
- Staff, partners, and other resources required to complete each task

There are many useful tools to develop and update your workplan. These include project management or spreadsheet software to record and track information in a table, Gantt charts, or program calendars.

Workplans are very detailed, and should reflect most if not all activities in your action plan. Teams generally prepare annual workplans, but the time frame can range from a few months to two or three years. The time frame is based on what is most useful for the short-term management of your program.

The detailed financial information compiled in Step 2.3 Financial Requirements provides a solid basis to prepare a detailed budget for your program. Budgets typically span a year, but can be for any period that works best for your program.

## Resource Chart

Step 3.1: Workplans and Budgets

## Outputs

- Detailed workplan for your project showing tasks, who will do them, and by when
- Project budget

## Guidelines & Tools

- [Workplans](#) (G)
- [Workplan Template](#) (T)
- [Budgeting](#) (G)
- [Budget Template](#) (T)

## Examples

- [Bering Sea Ecoregion](#) (workplan)
- [Congo TRIDOM Landscape](#) (workplan)

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

# Tip:

In working with multiple partners, each partner will likely have its own budget and workplan format. You will need a reliable means by which general progress on work and spending can be aggregated and reported to the team as a whole.

The timelines for corresponding workplans and budgets should be the same. This will help your team estimate and track costs to complete program activities.

## Application to Large Programs

Large programs require significantly larger and more detailed workplans to manage and track tasks—especially those programs that engage multiple partners to carry out activities. Your team should track whether activities and tasks were completed, and within the expected time frame and budget.

Although large programs have considerably longer life spans than smaller ones, you should still develop workplans and budgets for a one-, two-, or at most three-year time frame. Activities more than three years out will be captured by your action plan (Step 2.1).

## Example 1: Workplan for Bering Sea Ecoregion

To implement activities, the Bering Sea program team broke its objectives into actions and tasks. The following is an example of how these actions and tasks could be represented in a Gantt chart workplan. Please note that certain details (such as dates) were added purely for illustration. For the full illustrative spreadsheet, see the Bering Sea example link in the Step 3.1 Resource Chart.

### Bering Sea Workplan for Objective 3a

NOTE: This is a hypothetical workplan; only the actions and tasks are actuals. For the full list of actions and tasks, see the Bering Sea Strategic Plan.

Commercial Fisheries Objective 3a: Reduce the number of albatross and other seabirds caught in longlines & nets by 90% by 2010 in US waters and by 50% by 2015 in Russian waters.

KEY: ■ Milestones ■ Tasks ■ Phases

Task #	Task	Complete	Who	Deadline	Cost	NOV	DEC	JAN
3a.1	Expand tori line use in Russian longline fleet							
3a.1.1	Expand education program with fishermen	✓	K. Alvarez (WWF)	27.Nov.02	1,000			
3a.1.2	Secure funding for tori lines and equipment; purchase and ship.	✓	J. Miller (TNC)	15.Dec.02	2,000			
3a.1.3	Tori lines distribution between main Russian longline fishing companies	✓	L. Ko (EPA)	10.Jan.03	2,000			
3a.1.4	Other mitigating equipment promotion (integrated weight line, etc.)		K. Alvarez (WWF)	01.Feb.03	3,000			

## Example 2: Workplan for Congo TRIDOM Landscape

The five-year USAID Congo TRIDOM Landscape program uses one-year workplans to implement tasks grouped by activity categories. The following chart contains 7 of 284 tasks to be implemented in Cameroon, Congo and Gabon in one fiscal year by the conservation NGO partners. This workplan provides detail on the amount (percentage) of each task that will be complete every quarter, but does not list specific deadlines. For the full workplan, see the TRIDOM example link in the Step 3.1 Resource Chart.

Activity Category	Task	Responsibility		% Task to be Completed in FY06			
		NGO	Persons	Q1	Q2	Q3	Q4
Data Collection/ Assessment	Identify critical sites for maintaining long-term connectivity between TRIDOM forest blocks	WWF	De Wachter, Usongo, Madzou	25%	50%	75%	100%
Media/ Outreach/ Sensitization	Initiate environmental education and outreach program with men, women, and youth in communities using Ivindo river below Makokou	WCS	Chehoski	0%	100%	100%	100%
Implementation	Design conservation headquarters in Makokou for Ivindo, Minkebe, and Mwagne National Parks	WWF, WCS	De Wachter, Nigel	25%	50%	75%	100%

## Step 3.2 Fund-raising and Sustainable Financing



### Overview

All programs require funding, and those that span many years have critical needs for sustainable long-term financing. This step describes some of the means to raise funds for your program.

The many potential sources of program funding include:

- Direct government appropriations or public funds
- User fees and payments for environmental products or services
- Fines or penalties for illegal use of natural resources
- Debt reduction and debt-for-nature swaps
- Grants or contracts from government aid agencies
- Institutional, foundation, or private individual support
- Funds raised through or generated by conservation trust funds
- Corporate support and partnerships



## Resource Chart

### Step 3.2: Fund-raising and Sustainable Financing

#### Outputs

- Potential funding sources identified and, if needed, a sustainable funding plan developed
- Funding proposals submitted

#### Guidelines & Tools

- [Fund-raising](#) (G)
- [Sustainable Funding](#) (G)
- [WWF Internal Proposal Form](#) (T)

#### Examples

- Contact Development, GAA, & Sustainable Finance Staff in WWF-I, WWF-US & WWF-UK

➔ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

## Tip:

Given the long lead time required to prepare proposals and develop sustainable financing vehicles, you may want to review linked guidance in the Step 3.2 Resource Chart as you go through Steps 1 and 2. However, full-blown proposals and fund-raising should wait until Steps 1 and 2 are complete, so program action, monitoring and operational plans are available to share with donors and investors.

Traditional fund-raising involves soliciting donors such as aid agencies, foundations, corporations and individuals for grants that support some part of your program. These sources are excellent short- to medium-term sources of revenue, but in most cases cannot be counted on for continued long-term support over the life of your program.

Sustainable financing refers to recurring and reliable funding sources that support your program over the long term, such as trust funds, debt swaps and payments for services. All of these concepts require an investment in time (often more than a year) before you actually receive funding.

Your team can begin developing ideas or proposals, and begin meeting with key donors or officials while you are still creating your action and operational plans. After completing Steps 1 and 2, you will find that the logical and visual nature of the action, monitoring and operational plans help make a strong case to government officials, prospective donors and other key partners.

## Application to Large Programs

Large programs require significantly greater resources over longer periods of time than do smaller conservation programs. Some of the largest and most complex programs have costs into the hundreds of millions of dollars over many years, or even decades.

Before considering specific funding sources and sustainable finance mechanisms, your team should agree on your program's overall sustainable funding plan. You should then develop funding mechanisms that best fit that strategy.

Long-term sustainable funding for large programs will almost certainly come from a mix of sources that includes fees for services or other market-based solutions. Program managers often focus attention on more visible sources such as foundations, but market sources and even governments are often more reliable, long-term sources.

One of the most important means of supporting large programs is the engagement of partners. These might be donors, government agencies, or other NGOs who contribute financially or by executing part of the work.

## Example 1: Partner Engagement in Terai Arc

The original Terai Arc Landscape (TAL) team was limited to a few partners. However, the team soon recognized that its 50-year vision for forest regeneration, species distribution and sustainable livelihoods could not be achieved without significant funding and the engagement of many new partner organizations.

Early in the planning effort, the team began to engage more and more partners. By the time TAL began full implementation, the team had attracted 14 active partners, including aid agencies, the government and several NGOs not traditionally involved in conservation (e.g. CARE). See Step 3.4 for an example of the TAL governance structure used to manage the full engagement of these 14 partners.

## Example 2: Sustainable Funding Campaign for Amazon Region Protected Areas

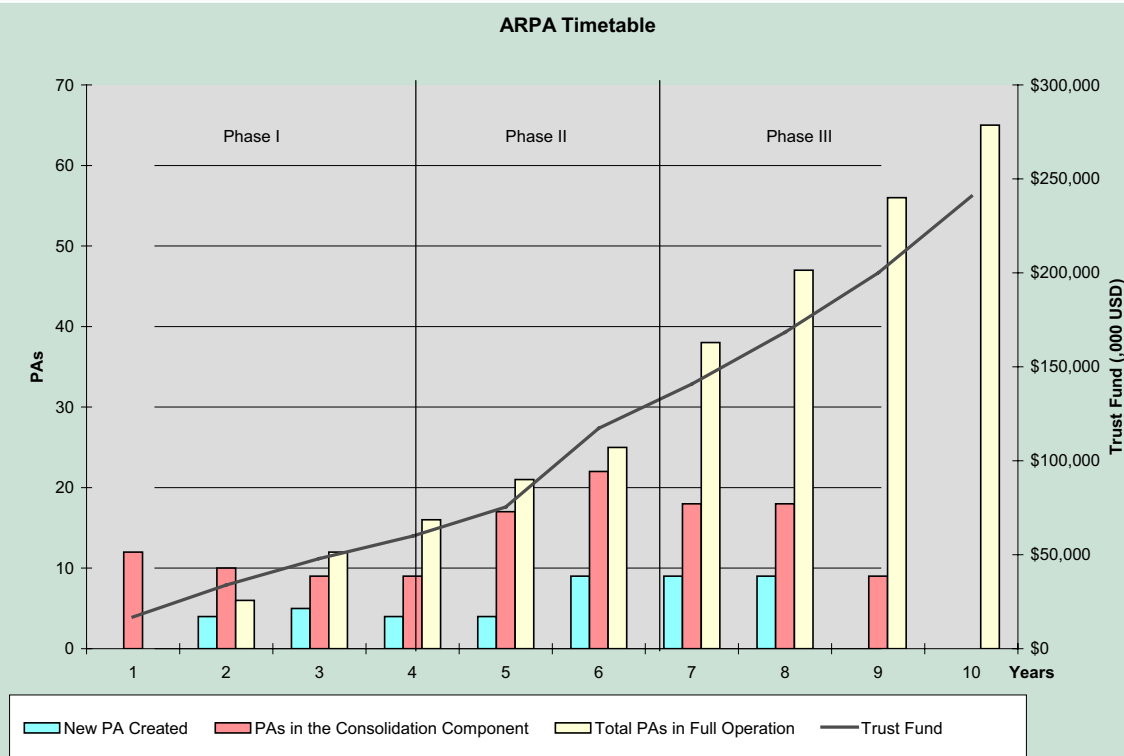
The Amazon Region Protected Areas (ARPA) program is a proposed network of 67 protected areas spanning the Amazon in Brazil. The sustainable funding campaign for this program, encompassing a land area larger than California, was successfully launched after completing the following:

- An assessment of capacity needs for creation, growth and achieving full management of all 67 protected areas (Step 2.3 Capacity Requirements)
- A comprehensive financial model (Step 2.3 Financial Requirements) representing the startup, consolidation and long-term running costs of all 67 protected areas

The Brazilian Biodiversity Fund (FUNBIO), an independent conservation trust fund, receives and disburses ARPA funds and handles all procurement for the program. FUNBIO will also manage assets and disbursements once the endowment is established.

The following graph displays the number of Amazon region protected areas in each phase over 10 years, with trust fund growth by year in the most optimistic scenario. For the full endowment projection, see the ARPA example link in the Step 2.3 Financial Requirements Resource Chart.

### ARPA Phasing and Endowment Projections



After its first three years of implementation, the ARPA plan has achieved:

- \$86 million raised toward a \$150 million, 10-year goal for establishing PAs
- Approximately 16 million hectares of PAs established
- Approximately 9 million hectares of new sustainable use areas
- \$14 million raised toward a long-term \$240 million endowment goal

### Example 3: Conservation Debt Swap and Trust Fund for Madagascar Protected Areas

In January 2005, the Madagascar Foundation for Protected Areas and Biodiversity was formally established as a public benefit foundation under Malagasy law. It was estimated that a \$50 million trust fund was needed to support conservation in Madagascar's protected areas. Conservation International and WWF have each contributed \$1 million, and the government of Madagascar contributed 10.2 million euro through a debt-for-nature swap with the government of Germany. In addition, the John D. and Catherine T. MacArthur Foundation provided \$500,000 for the fund, the World Bank committed \$7.5 million in International Development Association (IDA) grants, and both the French and German governments have expressed an interest in contributing.

### Example 4: Fees for Services in Indonesia's Bunaken National Park

In 2002 the Bunaken National Marine Park collected \$110,000 via an entrance fee system that charges foreign visitors \$17 per year or \$5.50 per day, and Indonesian visitors 28 cents per visit. The entrance fee system was successful because of user-friendly design, extensive marketing and effective enforcement. The park's advisory board—which includes local villagers, tourism operators, local NGOs, the local university and various government agencies—manages the system. Eighty percent of fee revenues are reserved for park management, whereas 20 percent are split among government agencies.

## Step 3.3 Capacity Building



#### Resource Chart

#### Step 3.3: Capacity Building

#### Outputs

- Strategies developed and implemented to address capacity shortfalls

#### Guidelines & Tools

- [Program Capacity Assessment Template](#) (T)
- [Capacity Building](#) (G)

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

### Overview

Capacity building is the process of developing your program's ability to scale up to a larger level of activity and deliver results. To build capacity, your team should address the needs identified during your program's capacity assessment (Step 2.3 Capacity Requirements).

Capacity building may include strengthening programmatic and technical support (staff, consultants, training), managerial structures and support, financial and accounting systems, HR recruitment and retention, IT systems, network and partner linkages, and development of financial or other resources.

There are few tools that explicitly help you build capacity. However, once you carry out an assessment and begin raising funds and implementing your program, there are many WWF Network and external sources of guidance and assistance.



## Application to Large Programs

As individual programs scale up, most do not have the leadership or staff skills to carry out work on the larger scale. This often leads to significant problems delivering the necessary work and achieving desired results.

A major challenge during large program implementation is building capacity through your many partners. The capacity assessment done in Step 2.3 Capacity Requirements should have included an examination of each partner's capabilities and gaps with respect to your program.

Now your team needs to work with each partner to ensure that your program has the right skills and other resources to implement activities and achieve long-term sustainability. Your team should verify that the right leadership, structure and resources are in place to efficiently and appropriately engage each partner.

## Step 3.4 Partnerships

### Overview

Each of your program partners is independent, with its own mission, program priorities and sources of funding. Unless partners' participation is bound by contracts or grants, you should have a management system that will engage each partner over the lifetime of your program.

To build a strong partner management system you should:

- Revisit your stakeholder analysis (Step 1.1) to make sure all key stakeholders are engaged
- Agree on accountability across all partners for completing all activities
- Set up a process for monitoring progress of all partners
- Budget for program management and monitoring support needs
- Execute informal or formal arrangements (contracts, grants, MOUs, PIAs, etc.) to carry out the work under your program with each partner
- Include all these elements in an informal or formal partner coordination or governance structure that will manage the work of the program going forward

## Application to Large Programs

Few large conservation programs achieve major, long-term results without the active, long-term participation of partners. These partners are drawn from your stakeholder analysis (Step 1.1) and may be conservation NGOs, other NGOs, government agencies, aid agencies or other donors.

A typical partnership system that has worked successfully for large programs has three parts:

1. A program oversight team or steering committee. This is frequently made up of some or all of your team, representing your closest and most important partners.

## Tip:

Based on your capacity assessment, your team may need to conduct training, hire consultants, or recruit and train new staff. Funding, staff, and the time to do this should be built into your operational plan (Step 2.3), workplans (Step 3.1), budgets (Step 3.1), and funding proposals (Step 3.2).

### Resource Chart

Step 3.4: Partnerships

### Outputs

- New partners identified and brought into program as appropriate
- Informal or formal arrangements with partners developed and implemented
- A system for work management, decision-making, and accountability

### Guidelines & Tools

- [Partnerships and Partner Management](#) (G)

### Examples

- [Terai Arc Landscape](#)
- [South Africa](#)
- [Amur-Heilong](#)
- [Mekong](#)

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

# Tip:

Whether your system has one level or many, the need for clear accountability is crucial—especially when many partners are involved. Limit the oversight entity to a few partners who are central to the program's success; push partners toward a long-term commitment of full-time participation in the system; and use the coordination office as the single point of control to manage work flow and monitor progress.

2. A program coordination or work team. This smaller unit is responsible for coordinating the day-to-day work of the program and reports up to the oversight team or steering committee. This role can be assigned to one of the partners on behalf of the overall program.
3. Internal or external program management and technical assistance (staff or consultants, or both). This function typically reports to the program coordination or work team.

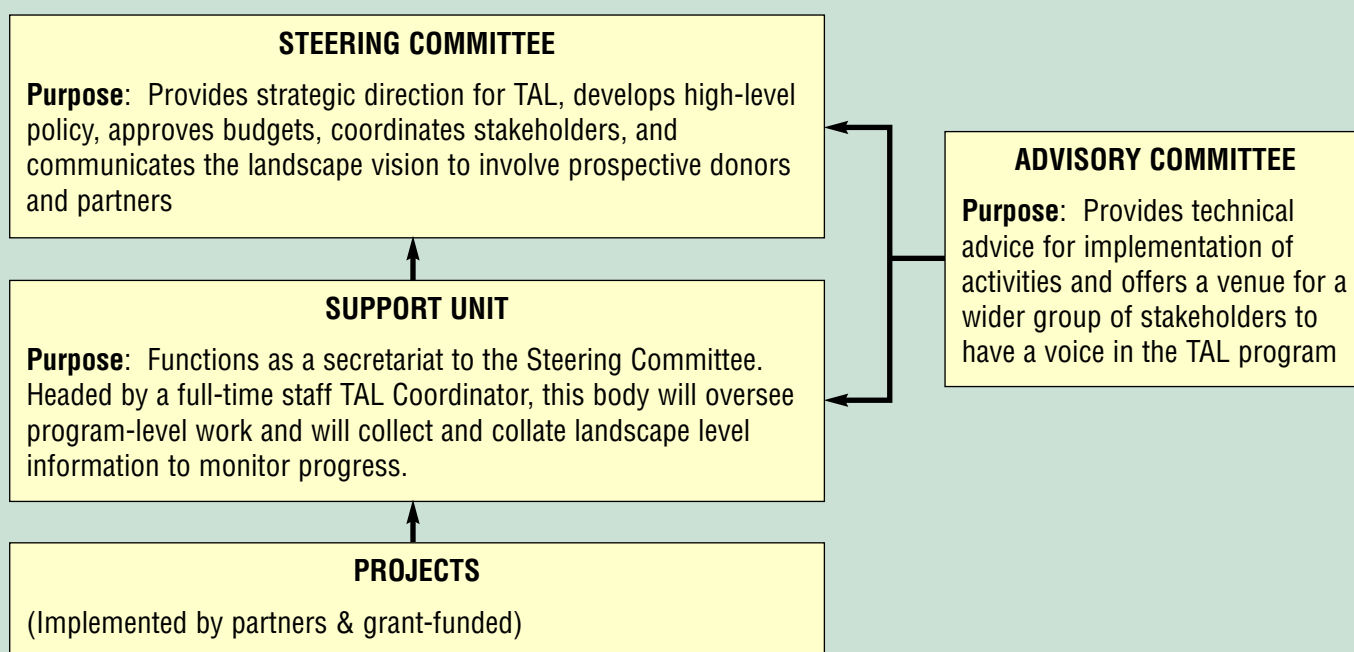
It is also common to find that the oversight team is supplemented by an advisory committee. The advisory committee might not have specific responsibilities in terms of day-to-day work management or monitoring, but provides a logical place for your broader team or other key stakeholders to participate in an advisory capacity.

For large programs, the number and frequency of pivotal changes because of new funders, government policies and partners is significantly higher. Adopting an effective management system helps large programs ensure better long-term decision making and more seamless continuity of operations.

## Example 1: Partner Governance Structure for Terai Arc Landscape

As Nepal's largest government-led conservation undertaking, the Terai Arc Landscape (TAL) program requires a management system that ensures full and effective implementation and monitoring of more than 10 partners' activities over 10 years. The system created by the TAL team (and adopted by the government) is flexible and adaptive, and will ensure better landscape-wide linkage among programs in the region.

### Terai Arc Landscape Governance System



# STEP 4 Analyze and Adapt

## Overview

Regardless of how well a program is planned and managed, your team should fund and carry out a consistent effort to monitor performance and results.

In Step 2 (Design), your team produced an action plan, an operational plan, and a monitoring plan. These plans provide you with a set of financial, activity-based and programmatic indicators against which to track your program's progress as well as specific status indicators for each biodiversity target.

You should have also built the costs of both progress and results monitoring into your financial model (Step 2.3 Financial Requirements), and into your short-term workplans and budgets (Step 3.1). Assuming you have the resources to carry out monitoring, you are now set to move through this step.

This step breaks down into four areas of activity that your team will carry out over the life of your program:

- 4.1 Manage incoming data on an ongoing basis
- 4.2 Analyze program results and assumptions
- 4.3 Analyze program performance
- 4.4 Adapt your plans and budgets

Remember—you should monitor only the data necessary to report status and make good management decisions over the life of your program. This will save costs and prevent your team from becoming bogged down by superfluous data sets.

## Resource Chart—Step 4: Analyze and Adapt

Step	Outputs	Guidelines & Tools	Examples
4.1: Manage Incoming Data on an Ongoing Basis	<ul style="list-style-type: none"> <li>Development and regular use of systems for collecting and storing data</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Manage Incoming Data</a> (G)</li> </ul>	<ul style="list-style-type: none"> <li>Contact Science, Finance and Administration, and Operations Departments in WWF-I, WWF-US and WWF-UK</li> </ul>
4.2: Analyze Program Results and Assumptions	<ul style="list-style-type: none"> <li>Regularly scheduled analysis of project results and assumptions</li> <li>Documentation of analysis and decisions</li> <li>Regular reports to project team members and key stakeholders</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Analyze Project Results and Assumptions</a> (G)</li> <li><a href="#">Technical Project Report Template</a> (T)</li> </ul>	<ul style="list-style-type: none"> <li>Contact Science, Finance and Administration, and Operations Departments in WWF-I, WWF-US and WWF-UK</li> </ul>

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)



Step	Outputs	Guidelines & Tools	Examples
4.3: Analyze Operational and Financial Functions/ Performance	<ul style="list-style-type: none"> <li>• Appropriate scheduled analysis of operational and financial data</li> <li>• Regular financial reports (including financial forecasts)</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Analyze Operational and Financial Functions/ Performance</a> (G)</li> <li>• <a href="#">R3 Financial Report</a> (T)</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Science, Finance and Administration, and Operations Departments in WWF-I, WWF-US and WWF-UK</li> </ul>
4.4: Adapt Your Plans and Budgets	<ul style="list-style-type: none"> <li>• Revised workplans and budgets</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Adapt Your Plans and Budgets</a> (G)</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Science, Finance and Administration, and Operations Departments in WWF-I, WWF-US and WWF-UK</li> </ul>

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## Application to Large Programs

The Analyze and Adapt Step is particularly important for large programs, which can be subject to any number of external forces or change that affect your intended results (e.g. new threats, economic dislocation, changes of government, or other unforeseen risks).

Your program results will benefit from consistent monitoring and reporting. The agility with which your program can adapt to unexpected results or to changes in circumstances depends directly on how thoroughly you follow this step.

## Step 4.1 Manage Incoming Data on an Ongoing Basis



### Tip:

Make realistic estimates of the time necessary to analyze program data and results. This will prevent a common problem: collecting a lot of data that you do not have enough time to analyze and assimilate.

It is important to systematically check, clean and code raw data as soon as you get it. As you develop your monitoring and operational plans (Steps 2.2 and 2.3), be sure to consider how you will store and back up your data.

Try to analyze and discuss your data regularly as you collect it, to verify that the program is on track. At various times, your team will be evaluating both programmatic and operational data, including progress metrics, key performance indicators (KPIs), results indicators and data on changes to core assumptions.

## Common Conservation Data Types and Sources

Type of Data	Sources
Quantitative (can be represented as numbers)	Biological censuses and transects of species, counts of poaching incidents, opinions recorded on a 4-point scale, numbers of tourist visitors
Qualitative (not easily represented as numbers)	Stories from stakeholders or focal group interviews
Spatial (linked to specific geographic coordinates)	GPS devices combined with quantitative or qualitative data, boundaries of a national park, remote sensing imagery
Financial	Comprehensive financial models (Step 2.3 Financial Requirements), business records, program operations
Pictures and images	Before-and-after photos of a specific site, stakeholder drawings, conceptual models, camera trap evidence
Video and audio clips	Recordings of stakeholder meetings, film clips of key project events
Metadata (data about your other data; documentation that accompanies any dataset)	Lists of all databases, descriptions of fields in a database, information about pictures in a photo album

For large, multipartner programs you have the additional challenge of tracking performance measures for all engaged partners against your workplans, action plan and financial model.

Depending on the amount of data you intend to analyze and the number of partners involved, the collection and management of this data can require significant time and effort.

### Example 1: Camera Traps in Terai Arc Landscape's Khata Corridor

Photographic documentation is an important monitoring technique that directly confirms the presence of key indicator species. In February 2006—two years after Nepal's Terai Arc Landscape Strategic Plan was formally adopted—a male tiger and a female rhinoceros were captured in a WWF camera trap in the Khata corridor community forest for the first time. This evidence proves that the corridor is starting to support wildlife movement between protected areas. Such photos can serve as inspirational pieces of evidence to motivate both local conservation practitioners and other key supporters of the program.

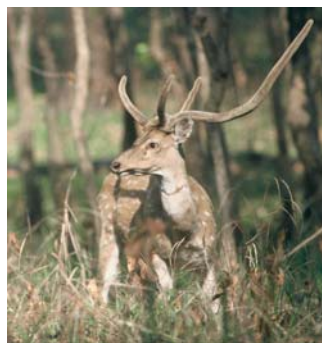


Nepal Terai Arc Landscape Photo Trap



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## Step 4.2 Analyze Program Results and Assumptions



One of the most important aspects of the monitoring and analysis process is that it allows you to systematically assess whether you are on track to achieve your stated goals, objectives and long-term results.

The analysis in this step largely focuses on the status and results indicators derived from the conceptual model, results chains, or logframes developed in Steps 1.4 and 2.1. The monitoring plan (Step 2.2) provides the blueprint for this analysis.

The types of analysis you employ may range from formal statistical studies to simple qualitative assessments. Input from experts outside core program team organizations may be especially useful for complex quantitative analysis.

### Example 1: Biological Indicators Analysis in Terai Arc Landscape

At various intervals, the Terai Arc Landscape (TAL) program team tracks the status of species and habitat targets (Step 1.3) using biological indicators against 10-year goals. Following is an abbreviated example of the type of biological target analysis that the team performs regularly.

Target	Indicator	Baseline (2004)	Activities to Assess or Improve	3-Year Action Plan Milestones	10-Year Strategic Plan Goals	% Toward Success at 3-year Milestone
Tigers	# of adult tigers in Terai Arc Landscape Nepal	~200	Conduct tiger (or proxy prey) surveys and enter in databases on status and distributions	>300	>400	38%
	# of adult tigers in Terai Arc Landscape India	<100		>100	>200	36%
	# of adult tigers in Terai Arc Landscape India/Bhutan	<100		>100	>200	25%



## Step 4.3 Analyze Operational and Financial Functions/Performance



Your program's action plan (Step 2.1) and financial model (Step 2.3 Financial Requirements) provide a good basis on which to develop activity-based and financial performance indicators your team can track regularly. It is important that your team regularly analyze these indicators to determine whether activities are being carried out, and whether financial resources are adequate to sustain these activities.

### Example 1: Activity-Based Analysis in Terai Arc Landscape

The Terai Arc Landscape (TAL) program team tracks units of each activity completed by each partner in each district during each year of its 10-year program. The values in this example are hypothetical, and do not reflect actual TAL program progress.

		Banke District				
	Unit	Intended Units to Complete in Year 1	Units Completed in Year 1	Gap	Intended Units to Complete by Year 10	% of Year 10 Program Goal Completed to Date
<b>2.Sustainable Forest Management</b>						
2.1 Restore Degraded Forest		43,199	41,000	2,199	390,000	11%
2.1.1 Plantation by government agencies	Hectare	5,539	3,000	2,539	50,000	6%
2.1.2 Plantation by Communities	Hectare	6,391	7,000	(609)	75,000	9%
2.1.3 Natural Regeneration	Hectare	29,824	30,000	(176)	250,000	12%
2.1.4 Private Plantation	Hectare	593	400	193	10,000	4%
2.1.5 Restoration at Leasehold forest land	Hectare	852	600	252	5,000	12%

## Step 4.4 Adapt Your Plans and Budgets

Although the planning your team carried out in Steps 1 and 2 was thorough, it may be necessary to revisit your assumptions or even targets, threats, goals, objectives and activities if monitoring results indicate a significant change in your program.

As your team makes changes, carefully document the rationale behind each change so your program partners and stakeholders understand why modifications were made. Communicating both progress and changes to your team, partners, donors and other stakeholders is a critical part of program analysis.

# STEP 5 Share

## Overview

The final step in the program management cycle is devising a systematic means to share lessons, best practices, outputs and results with your team, and with key internal and external audiences.

Although the concept of capturing and sharing learning seems simple, it is often the last thing practitioners think about in planning and managing programs. As a result, valuable lessons are lost.

It is critical to capture lessons so that program staff and managers can learn from previous experiences and save valuable time. World Wildlife Fund staff can use Connect or one of the organization's other knowledge or data management systems. All readers can use a broader conservation sharing network, such as ConserveOnline ([www.conserveonline.org](http://www.conserveonline.org)).

The Share Step includes giving and receiving feedback, conducting evaluations and audits, and educating partner organizations and other stakeholders. This step has four basic areas of activity your team should consider:

- 5.1 Lessons, results and best practices
- 5.2 Formal communication products
- 5.3 Feedback and evaluations
- 5.4 Learning systems and culture

Step	Outputs	Guidelines & Tools	Examples
5.1: Lessons and Best Practices	<ul style="list-style-type: none"> <li>Documented lessons and best practices</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Sharing Lessons</a> (G)</li> </ul>	<ul style="list-style-type: none"> <li>See <i>Sharing Lessons</i> Guidance for short examples</li> </ul>
5.2: Formal Communication Strategy and Products	<ul style="list-style-type: none"> <li>Identification of key audiences</li> <li>Development of communications strategy</li> <li>Development and distribution of communications products</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Communications Strategy</a> (G)</li> </ul>	<ul style="list-style-type: none"> <li>See <i>Communications Strategy</i> Guidance for short examples</li> </ul>
5.3: Feedback, Evaluations and Audits	<ul style="list-style-type: none"> <li>Feedback</li> <li>Evaluations and/or audits</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Feedback, Evaluations and Audits</a> (G)</li> <li><a href="#">Evaluations Terms of Reference</a> (T)</li> <li><a href="#">Audit Tool</a> (T)</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Colombia Social Change Evaluation</a></li> <li><a href="#">Minshan Panda Program Evaluation</a></li> </ul>
5.4: Performance and Learning Culture	<ul style="list-style-type: none"> <li>Demonstrated commitment from leaders to learning and innovation</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Performance and Learning Culture</a> (G)</li> </ul>	<ul style="list-style-type: none"> <li>See <i>Performance and Learning Culture</i> Guidance for short examples</li> </ul>

➡ To access hyperlinks, please visit [www.panda.org/standards](http://www.panda.org/standards)

## Step 5.1 Lessons and Good Practice



Your team should discuss the best means by which it can keep track of the lessons learned, work results (both successes and failures), and best practices related to different steps of the program management process.

At the very least, one organization should do this for the team, and set up one folder or repository for final versions of each product and output from the process—including documentation of program progress and results.

## Step 5.2 Formal Communication Strategy and Products

Your team should also have a formal or informal strategy to communicate results of your work to current and future donors and stakeholders.

There are various guidelines and tools on communication strategies and techniques offered by the communications departments in WWF-I, WWF-US, or other WWF offices. You should take advantage of these services in communicating your program's progress to your donors, other stakeholders and the media.

In large programs with long time horizons, it is critical to document the steps you took and progress you made for the benefit of future participants. This is especially important if you change your assumptions, goals, objectives, action plan, or operational plan.

## Step 5.3 Feedback, Evaluations, and Audits

Evaluations and audits are two formal mechanisms to receive feedback about program findings, processes and lessons learned. Evaluations assess programs against their own stated goals and objectives. Audits assess programs against a formal set of standards such as the set used in this guide. Your team might consider carrying out a more formal evaluation or audit at some point in your program's life cycle. This would augment your regular monitoring data and allow you to take a snapshot of overall program status.

## Step 5.4 Performance and Learning Culture

World Wildlife Fund has developed various systems for capturing learning, such as WWF Connect or the WWF-US knowledge management repository (on the WWF-US intranet). As WWF rolls out usage of the Standards in large programs, your team should use these systems (or others as appropriate) to share both successes and failures with other practitioners around the world.

*Please email outstanding guidance documents, tools and examples pertaining to any step of the Standards process to [strategies@wwfus.org](mailto:strategies@wwfus.org), so they can be shared with the broader conservation community. Alternatively, visit [www.conserveonline.org](http://www.conserveonline.org) for the largest compilation of conservation management best practices on the Internet.*



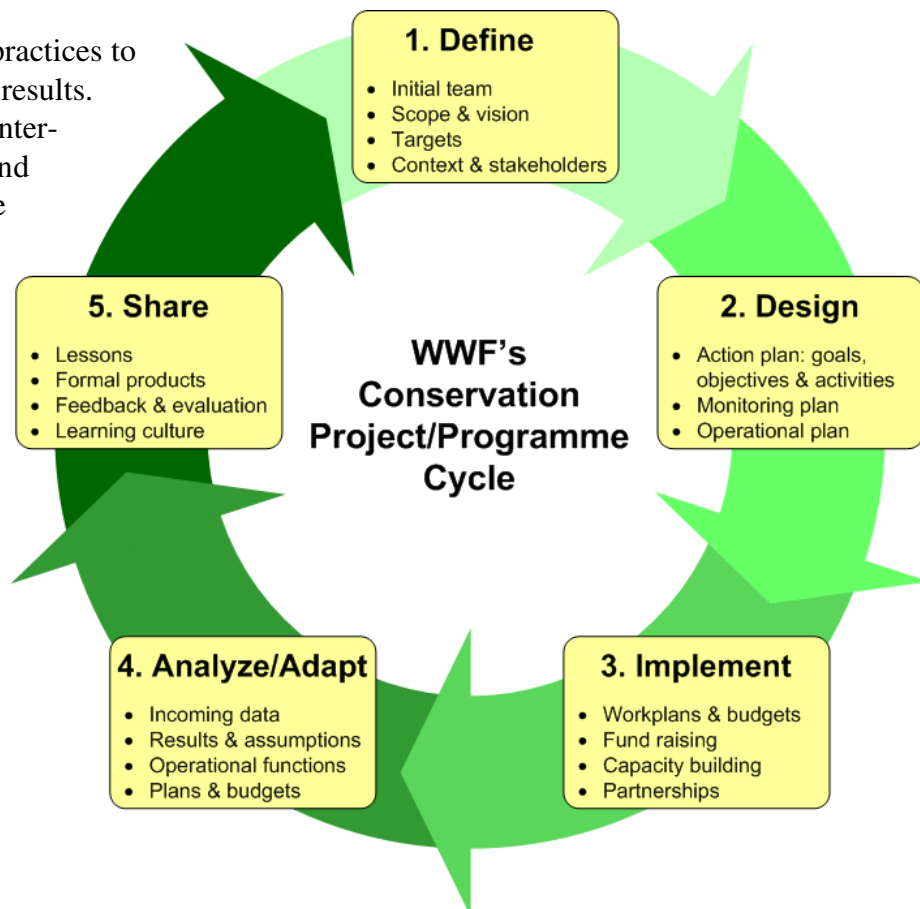
# Appendix

## WWF Standards of Conservation Project and Program Management

The WWF Standards are a set of best practices to help practitioners deliver conservation results. Developed in conjunction with major international environmental NGOs and endorsed by the WWF Network, the Standards lend consistency to planning, implementing and monitoring effective conservation projects and programs worldwide.

### Steps

Visit [www.panda.org/standards](http://www.panda.org/standards) to access guidance, tools and examples for each step. Please email outstanding guidance documents, tools and examples to [strategies@wwfus.org](mailto:strategies@wwfus.org).



### 1 Define

- 1.1 Team Composition and Operations
- 1.2 Scope and Vision
- 1.3 Targets
- 1.4 Context and Threats

### 2 Design

- 2.1 Action Plan: Strategies, Goals, Objectives and Activities
- 2.2 Monitoring Plan
- 2.3 Operational Plan

### 3 Implement

- 3.1 Workplans and Budgets
- 3.2 Fund-raising and Sustainable Financing
- 3.3 Capacity Building
- 3.4 Partnerships

### 4 Analyze and Adapt

- 4.1 Manage Incoming Data on an Ongoing Basis
- 4.2 Analyze Program Results and Assumptions
- 4.3 Analyze Operational and Financial Functions/Performance
- 4.4 Adapt Your Plans and Budgets

### 5 Share

- 5.1 Lessons and Best Practices
- 5.2 Formal Communication Strategy and Products
- 5.3 Feedback, Evaluations, and Audits
- 5.4 Performance and Learning Culture

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