Resource requirements for Aichi Target 1 – Awareness Raising

Progress report for the High Level Panel meeting

27 July 2012

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Progress report for the High Level Panel meeting

A report submitted by ICF GHK

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Contents

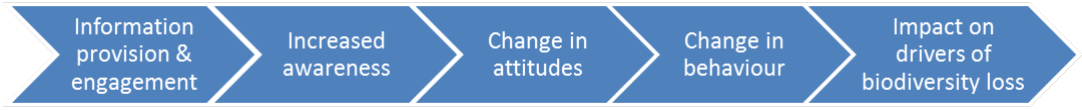
1 INTRODUCTION

The following Aichi target has been set with regard to awareness-raising of biodiversity:

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

An understanding, awareness and appreciation of biodiversity underpins the ability and willingness of individuals to make changes to their behaviour and creates the "political will" for governments to act. It is hoped that this change in behaviour will then affect the key drivers of biodiversity loss.

Figure 1.1 Links between awareness, attitudes, behaviour and biodiversity loss



1.1.2 Links to the CBD and COP Decisions

Target 1 underpins many of the other Targets and should facilitate their implementation. The target is also closely linked to Article 13 of the Convention and relevant decisions on communication, education and public awareness (CEPA).

Article 13: Public Education and Awareness

The Contracting Parties shall:

a. Promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity, as well as its propagation through media, and the inclusion of these topics in educational programmes; and

b. Cooperate, as appropriate, with other States and international organizations in developing educational and public awareness programmes, with respect to conservation and sustainable use of biological diversity.

COP 4 urged Parties when requesting assistance through the financial mechanism (the GEF) to propose projects which promote measures for implementing Article 13 (Decision IV/10 B, paragraph 9). The Programme of Work on Communication, Education, and Public Awareness, or CEPA, aims to key stakeholders to raise people's awareness on various issues included the role and importance of biodiversity, how it can be used in a sustainable manner, and the role of the Convention of Biological Diversity.

Numerous decisions have also been taken regarding Article 13, including Decisions V/17, VI/19, VII/24, VIII/6, IX/32, and IX/33 on the International Year of Biodiversity, and also Decision X/18 among other direct or indirect references to this issue. COP 10 Decision X/18: Communication, education and public awareness and the International Year of Biodiversity invites Parties and requests the Executive Secretary to start executing various tasks to improve CEPA activities (http://www.cbd.int/decision/cop/?id=12284)

The CEPA programme (http://www.cbd.int/cepa) of work seeks to:

- Communicate the scientific and technical work of the Convention in a language that is accessible to many different groups;
- Integrate biodiversity into Education systems in all Parties to the Convention;
- Raise Public Awareness of the importance of biodiversity in livelihoods, as well as its intrinsic value (http://www.cbd.int/cepa).

The CEPA programme is a key instrument for raising awareness and will therefore be an important element in this assessment given that it is an existing mechanisms that can be leveraged for action.

The CBD have proposed the following milestones for this target:

- By 2011, basic public awareness campaigns about biodiversity and the steps people can take to protect it are initiated;
- By 2014, national baseline surveys are carried out and comprehensive national strategies to promote awareness of the values of biodiversity are prepared and adopted;
- By 2016, relevant educational curricula have been developed and implemented.
- (http://www.cbd.int/sp/targets/rationale/target-1/).

1.1.3 Links to other targets

Target 1 is arguably linked to all the other Aichi targets; increased awareness of different audiences will help to deliver the goals associated with the different cluster groups. For instance, awareness amongst farmers of sustainable agricultural techniques should help to improve the sectors sustainability if more farmers therefore use these methods.

The other targets therefore tend to be related to key target audiences, whose awareness levels, if raised, should help to deliver biodiversity benefits. However, there are also other elements to raising awareness which are important and which would not necessarily be considered in the other targets, such as campaigns for reaching the wider public or integration of biodiversity into education programmes in order to reach children and young people. It was decided therefore that the analysis for this target would focus on different activities (which can be used to target different audiences), rather than focusing the analysis on the different types of audiences, as insights into the latter can hopefully be identified from the analysis being undertaken on the other targets.

1.1.4 Challenges in estimating the resource needs for meeting Target 1

Target 1 is very broad and open ended, and does not specify either:

- The target audiences (i.e. whose awareness should be raised);
- The types of activities (i.e. how awareness should be raised); or,
- The scale of the activity (i.e. by how much awareness should be raised).

This has been the main challenge, and has been consistently highlighted as a problem by stakeholders with whom have spoken to date. The toolbox for communication, awareness raising and education activities is vast, and each tool can be implemented in a range of ways and to varying degrees (a workshop can involve just a half-day meeting with 20 experts, or it can involve 150 stakeholders across a whole range of sectors lasting 2 days, etc.).

The other challenge encountered is similar for many of the other targets, in that it is much easier to identify data and costs on these activities in the Western Hemisphere. Identifying and accessing data for the less developed countries and other regions of the world is proving more difficult. However, we have made, and are making, every effort to identify examples wherever possible.

It has also become clear that whilst there is considerable information available on the range and types of different awareness campaigns and activities, actual information on their costs are rarely published. This means that it is often necessary to identify and contact relevant stakeholders involved in these projects to ask for information on the costs associated with these activities. Contacting relevant individuals has therefore proved more effective than desk research, which has made the process slightly more time consuming.

For instance, we tried to contact all the relevant CEPA country experts (roughly 40 people). However, few responded. Moreover, the majority of these contact details provided were no longer active.

2 ACTIONS

Given that the ways of implementing this target are very varied and very much context-dependent, we have adopted a very flexible approach which will allow us to cost a smaller number of prioritised activities, which can then be used as indications of the kinds of resource needs that are likely to arise from delivering this target. We have then develop two cost scenarios (high and low), based on the differences between higher and lower income countries.

We have therefore prioritised the analysis to focus on a small number of different activities. We have identified three main types of activity, with a totally of 7 activities to be costed, and which relate to the 10 priority activities identified for the CEPA programme (although the latter tend to be more process focused):

- A baseline survey of awareness (and future monitoring)
- A communication / awareness strategy
- Five specific awareness raising activities, including:
  - Running a mass media campaign
  - Training programmes
  - Integration of biodiversity into education
  - Workshops
  - Events

These are not the only activities that are available or necessary raise awareness. Equally, not all of these need to be implemented. However, a selection of these activities could be used in different ways to deliver the target to suit different contexts.

The key audiences for these activities will, for instance, vary between countries; some audiences may be more important in some country contexts than others. This should be identified by policy makers when creating a national awareness strategy. Some activities are more suited to some audiences than others (see Table 2.1). In selecting the activities to be prioritised for this analysis, we have tried to identify those of a sufficient number and type that can be used to target a number of different audiences

Table 2.1 Examples of how the different activities are suited to target different audiences

	Specific sectors (e.g. farming, forestry, fisheries)	Children / Students	Government / Policy makers	NGOs	Media	Wider public
Workshops	X		X	X	X	
Training programmes	X					
TV / Radio campaigns		X				X
Posters / Leaflets campaign	X		X			X
Integration into education		X				
Events	X	X	X	X	X	X

3 METHOD OF ASSESSMENT

3.1 Overview of the method of assessment

As noted above, we have identified three main types of activities associated with raising awareness. We are assuming that the first two (conducting a baseline survey of awareness levels, and developing a national strategy on raising awareness) comprise up-front investment needs to build enabling conditions and capacity, whilst the six specific activities relate more to potential on-going or recurrent expenditure (although some could also be one-off activities). The six specific activities act as a "menu of options" for countries to consider; not all activities will have to be implemented. Some may, for instance, not be necessary or suitable in certain contexts.

We have completed an initial estimate of the resource needs associated with each of the activities. These will be further developed and refined on the basis of additional desk research and any further input from stakeholders.

Table 3.1 below shows progress for completing the assessment.

Table 3.1 Progress against programme

Activity	Progress	Estimated % completion
Review – context, needs, expectations	Review completed	100%
Determine method of assessment	Method of assessment prepared. Activities have been identified. Type and scale of action assessed, broken down by investment needs and on-going / recurrent expenditure	100%
Identify data sources and potential contacts	Data sources identified – additional sources may be identified through further desk research and consultation	80%
Assess resource needs to meet the targets	Costs identified through previous similar activities; associated resource needs have been estimated for each of the activities. These need to be further refined.	80%
Assess scale of additional expenditure required	Factors for upscaling resource requirements have been identified; ratios to be determined	20%
Describe different funding sources	Preliminary information on different funding sources collected; description and examples to be developed	20%
Describe benefits	Preliminary information on benefits collected; description and examples to be developed	20%

3.1.1 Investment needs – developing enabling conditions and building capacity

Although there are a range of options for developing the necessary conditions and capacity for raising awareness, we have focused on estimating the resource needs of two activities:

- Developing and implementing a survey of people's awareness on biodiversity; and,
- Developing a national strategy for raising awareness on biodiversity.

Both of these activities are considered necessary preconditions to effectively raising awareness, as they form the basis upon which the other activities can be implemented, and measured against.

The first element is important in order to establish a baseline against which one can measure progress once awareness-raising activities are underway. In many countries it will be unclear to what extent people are aware of biodiversity, and therefore how much effort to raise awareness may be required, or how it should be targeted (including which audiences / sectors). We have also assumed that the survey will then be repeated in the future to assess progress and results. Resource needs associated with these, iterative, surveys are included

under on-going expenditure (although the assessment is done in the same section as the investment needs).

The second element is crucial for determining the priorities for each country (and could be informed by the results of the survey), in that the strategy will determine what biodiversity means to the national audience, and how to best tap into the ways in which biodiversity resonates most with different stakeholders within the country. It will also help to identify the key stakeholders, actors and communicators, which will help to identify what are the key activities that should be prioritised for raising awareness.

As has become clear in the development of the NBSAPs, the process of developing national strategies on biodiversity also, in itself, raises awareness amongst policy makers and stakeholders.

The approach has been to review activities from different country contexts aimed at measuring the level of awareness and developing national strategies, to determine the resource needs associated with such actions. On this basis, an indicative unit cost has been established, which has been aggregated and scaled up to arrive at a global estimate.

3.1.2 Recurrent expenditure – implementing awareness-raising activities

As mentioned above, there are a whole range of mechanisms available to raise awareness. We have focused on estimating the resource needs of the following activities:

- Running a mass media campaign
- Introducing training programmes
- Integration of biodiversity into education
- Running workshops / conferences / events
- [Repeated national surveys to assess progress and results – however analysis for these has been included under the investment needs assessment]

Although being considered here under on-going expenditure, some of these activities could be one-off campaigns rather than necessarily recurrent spend. There is considerable flexibility in how long these activities will last, and therefore how much the total cost will be will depend on the country-specific needs. Given the Target's timetable, we will attempt to estimate the total resource needs required to 2020, based on certain assumptions (e.g. number of events, number of workshops etc.).

We have reviewed examples of these kinds of activities from different country contexts to determine the resource needs associated with such actions. In some cases, these include awareness raising activities not just on biodiversity but also any other awareness raising activity that can be costed on other issues (e.g. on HIV, climate change, waste, etc.) Examples of the identified activities and associated costs have drawn on as many sources and looking at as many different countries as possible. Further desk research will attempt to identify further examples.

On the basis of this information, we have identified what seems to be the most reasonable unit cost of each activity. The available data has informed what units seems most appropriate for estimating indicative costs. This process has then resulted in an estimate of the average cost (or range of costs) of each activity.

We have adapted this average cost, where appropriate, to reflect the different contexts of different types of countries. We have classified countries into two different types by income (i.e. GNI per capita), drawing on the World Bank classification of countries.[1]

We have divided countries on this basis to reflect that lower income economies are likely to require a different approach, and may also require activities that are more resource-intensive given that necessary institutional structures and infrastructure are relatively undeveloped (e.g. in the case of educational programmes), or given that the audience may be harder to reach (e.g. in the case of population surveys or mass media campaigns).

[1] http://data.worldbank.org/about/country-classifications/country-and-lending-groups

- Lower income economies: these combine the World Bank's classification of low income econonomies (GNI per capita of $1,025 or less) and lower-middle-income economies (GNI per capita of $1,026 - $4,035). Together, these amount to 90 countries.
- Higher income economies: these combine the World Bank's classification of upper-middle-income economies (GNI per capita of $4,036 - $12,475) and high income economies (GNI per capita of $12,476 and over). Together, these amount to 124 countries.

Overall, the assessment of unit costs has allowed a sort of "menu" of costed options to be developed that can then be considered by individual countries. Countries can then develop a general understanding of the resource needs associated with an awareness campaign depending on which activities they choose to implement, and at what scale.

For each type of country, we have then developed a high cost and a low cost scenario, using different assumptions. Where it seems appropriate, these assumptions differ for lower and higher income countries. However in some cases they are the same and only the estimated unit costs reflect the differences between lower and higher income countries.

4 ASSESSMENT OF RESOURCE NEEDS

The sections below present the available evidence of resource needs associated with the different activities identified in Section 2 above.

Based on this assessment, an overview of the key results is given in Section 5. Section 6 then discusses these results, including the confidence levels associated with the estimates and any gaps or further research needs.

4.1 National surveys of awareness on biodiversity

National surveys of public opinion are often used to establish people's views on various subjects. Unlike a population census, surveys tend to be based on only questioning a sample of the population. The results are then extrapolated to the wider population. There are various methods for surveying people, including by telephone, online surveys, postal surveys as well as face-to-face interviews.

Benchmark polls are the first poll taken in a campaign. Subsequent polls are then used to measure progress against these initial results. Benchmark polls can also be used to, for example, determine what audiences or subject areas to target in a campaign. In the case of awareness raising, for instance, an initial opinion poll can highlight whether certain groups are less or more aware than others, and can also provide some insights into what aspects about biodiversity resonate most with the wider public or different audiences. This should help to inform where and how resources might be most effectively spent, including which types of activities, which audiences, and what messages might be most effective.

A baseline survey of public awareness and opinion on biodiversity is therefore a crucial first step in developing and implementing a campaign for raising awareness, and can inform the development of a national strategy (see Section 0 below).

Given that polls are based on a sample of a population, the results are subject to sampling or margins of error. These can be reduced by increasing the sample size, although there are associated costs with doing so, and diminishing rates of return. Typically, a sample size of 1,000 is used (which normally requires several thousands of participants to be surveyed in order to obtain that number of responses). For instance, this is the sample size used for both the Eurobarometer and the Biodiversity Barometer led by the UEBT (Union for Ethical Bio Trade). This sample size is generally thought to have a margin of error of about 3% of the whole population (i.e. 95% of responses will yield an outcome within 3% of the true percentage among the population).

For instance, given China's population (the country with the highest population), and adopting a target confidence level of 95% and a target confidence interval (i.e. margin of error) of 3, this would require 1,067 people to be interviewed. The figure is similar for most countries. For instance, even when the population drops to 21,000 (e.g. Palau), the sample size needed for the required confidence levels and intervals is 1,016.[2]

We have therefore assumed that a national survey would be based on a sample size of 1,000 people.

The available information suggests that in countries where the wider public is easy-to-reach, the resource needs for a national survey should be **around US $10,000**. Higher income countries are likely to have systems in place that mean that populations are easier to reach.

Where the public is more difficult to reach (i.e. in developing countries where more resource intensive methods would be required, such as face-to-face interviews), the resource needs are likely to increase. An indicative cost is likely to be **around US $30,000**. Populations of lower income countries are likely to be less easy to reach and may, therefore, require more resource intensive methods.

[2] http://www.surveysystem.com/sscalc.htm

Given 124 higher income and 90 lower income countries, the global resource needs for conducting a baseline national survey of public awareness on biodiversity in every country is therefore likely to amount to around **$4 million**.

Low cost scenario: Repeated this survey once more at the end of the target period (i.e. 2020) would mean a **total global cost of $8 million**.

High cost scenario: Repeating this survey twice, once to gauge progress and to inform and adapt, where necessary, the ongoing awareness campaign (e.g. in 2016) and again at the end of the target period (i.e. 2020), would mean **a total global cost of $12 million**.

Table 4.1 Examples of the costs associated with national surveys of awareness

Country	Description	Cost (US $)
Europe	Eurobarometer population survey in all Member States (January 2004), based on a sample of 1,000 adults in each Member State and conducted by telephone	11,000 per country (295,000 total)
Europe	Eurobarometer population survey in all Member States (July 2004), based on a sample of 1,000 adults in each Member State and conducted by telephone	10,000 per country (266,000 total)
Europe	Eurobarometer population survey in all Member States (November 2004), based on a sample of 1,000 adults in each Member State and conducted by telephone on a specific issue (the future Constitutional Treaty)	5,600 per country (152,000 total)
Europe	Eurobarometer population survey in France (May 2005), based on a sample of 2,000 adults and conducted by telephone on a specific issue (the future Constitutional Treaty)	77,000
Europe	Eurobarometer population survey in the Netherlands (June 2005), based on a sample of 2,000 and conducted by telephone on a specific issue (the future Constitutional Treaty)	63,000
Europe	Survey of 1,000 adults in each of the 27 Member States, using existing surveys (i.e. consumer omnibus surveys) and adding specific questions on topic of interest (i.e. not a bespoke survey)	7,000 (per country)
India & Peru	Biodiversity barometer led by the Union for Ethical Bio Trade. Involved face to face or phone interviews with 1,000 adults. Costs do not include time spent on analysis.	18,000 – 25,000 per country
Southern Caucasus	Public awareness indicator. Face-to-face interviews among a representative sample of the adult population (18-years and older).	14,000
UK	Survey of 1,000 micro businesses by telephone (i.e. hard to reach population)	40,000
UK	Survey of 250 a specific type of businesses	50,000
Various	Biodiversity barometer led by the Union for Ethical Bio Trade. Cost of surveying 8 countries (Brazil, France, Germany, UK, Switzerland, USA, Japan and South Korea), on the basis of surveying 1,000 adults in each, where all were conducted using internet panels. Costs do not include time spent on analysis.	6,000 – 9,000 per country

Source: various, including personal communication with the Union for Ethical Bio Trade, previous work undertaken by GHK Consulting, and information from the European Commission (http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2005-3914+0+DOC+XML+V0//EN&language=RO)

4.2 Developing a national strategy for raising awareness on biodiversity

Developing a national strategy can be time and resource intensive. Resources are typically needed for, *inter alia*:

- Undertaking analysis
- Hiring consultants
- Hosting consultations
- Hosting workshops
- Reporting
- Dissemination of results

Given these various elements, it can be a time consuming process. Although it is possible to develop a national strategy in less than a year, the typical timeline for the process to develop a strategy can take from 2-3 years from start to finish. This can increase if there are delays in the approval process. Typically, time is required upfront to make the decision to launch the process. Once that decision is made, analysis can take 3-12 months. The consultations can also take several months to a year, depending on how coherent the views are and on how extensive the consultation needs to be. Report writing can then take anywhere between 2-12 months, which might include additional consultations and validation. The adoption process can take a long time—even years—depending on the level at which the strategy is approved and the political will to move it forward.[3]

Examples of the costs associated with developing a national strategy have been identified, and are shown in Table 4.2 below.

The analysis is largely based on the total cost (i.e. including co-financing) of GEF projects involving the development of national strategies, in particular National Biodiversity Strategies and Action Plans (NBSAPs). A few other examples are also included, such as the cost in South Africa of developing a strategy on access and benefit sharing of genetic resources, as well as a communication strategy on climate change in Eastern Europe.

It is likely that these costs provide a relatively accurate representation of how much it would cost to develop a National Strategy for Raising Awareness on Biodiversity.

The evidence suggests that, on average, the resource needs associated with developing a national strategy is **$250,000 per country.**

Assuming that there are 214 countries in the world (based on the World Bank classification), this produces **total global resource needs of about $54 million** for developing national strategies on raising awareness of biodiversity.

No high and low cost scenarios have been developed, as developing a national strategy is a fixed, one-off cost for each country.

Table 4.2 Examples of the costs associated with developing a national strategy

Country	Description	Estimated Cost (US $)
African country	MDG-based rural development strategy	92,000
Afghanistan	Development of National Biodiversity Strategy and Action Plan (NBSAP), Assessment of Capacity Building Needs for In-situ and Ex-situ Biodiversity Conservation	464,000
Albania	Biodiversity Strategy, Action Plan and National Report	96,000
Algeria	National Biodiversity Strategy, Action Plan and Report to the CBD	230,500
Algeria	Elaboration of a National Climate Change Strategy and Action Plan	194,670

[3] ten Kate, K., *et al*. (undated) Preparing a national strategy on access to genetic resources and benefit-sharing.

Country	Description	Estimated Cost (US $)
Angola	National Biodiversity Strategy and Action Plan and Preparation of the First National Report to the Conference of the Parties	398,000
Antigua And Barbuda	National Biodiversity Strategy, Action Plan and First National Report to COP	139,000
Argentina	National Biodiversity Strategy, Action Plan and First National Report to CBD	348,890
Armenia	National Biodiversity Strategy, Action Plan and First National Report to CBD	174,800
Bahamas	National Biodiversity Strategy, Action Plan and First National Report to the Convention on Biological Diversity in the Bahamas	150,000
Barbados	National Biodiversity Strategy, Action Plan and First National Report to the Convention on Biological Diversity	143,640
Belize	Formulation of the National Biodiversity Strategy and Action Plan for its Implementation	184,500
Benin	National Biodiversity Strategy, Action Plan and Country Report to the COP	233,820
Bhutan	National Biodiversity Conservation Strategy and National Action Plan	116,546
Bolivia	Formulation of the National Biodiversity Strategy and Action Plan for its Implementation	275,752
Bosnia-Herzegovina	Biodiversity EA Preparation of National Biodiversity Strategy and Action Plan, National Reports and Establishment of a National Clearing House Mechanism	325,150
Botswana	National Biodiversity Strategy and Action Plan	350,000
Brazil	National Biodiversity Strategy and National Report	2,342,500
Burkina Faso	National Biodiversity Strategy, Action Plan and Country Report to the COP	230,977
Burundi	National Biodiversity Strategy, Action Plan and Country Report to the COP	229,950
Cameroon	Preparation National Biodiversity Strategy, Action Plan and First National Report to the CBD	300,000
Cape Verde	National Biodiversity Strategy, Action Plan and Country Report to the COP	208,151
Central African Republic	National Biodiversity Strategy, Action Plan and Country Report to the COP	164,700
Chad	National Biodiversity Strategy, Action Plan and Country Report to the COP	218,160
China	National Biodiversity Strategy, Action Plan and the First National Report to the CBD	59,400
Colombia	National Biodiversity Strategy, Action Plan and the First National Report to the CBD	253,000
Comoros	National Biodiversity Strategy, Action Plan and Country Report to the COP	131,700
Congo	National Biodiversity Strategy, Action Plan and Country Report to the COP	247,860

Country	Description	Estimated Cost (US $)
Cook Islands	National Biodiversity Strategy, Action Plan and Country Report to the COP	204,218
Cote d'Ivoire	National Biodiversity Strategy, Action Plan and the First National Report to the CBD	237,600
Croatia	Biodiversity Strategy, Action Plan and National Report	102,000
Cuba	National Biodiversity Strategy, Action Plan and First National Report to the CBD	206,280
Czech Republic	Biodiversity Strategy, Action Plan and National Report	101,000
Djibouti	Capacity Building, Development of a National Biodiversity Strategy and Action Plan and National Report to the CBD	558,260
Dominica	National Biodiversity Strategy, Action Plan and Report to the CBD	96,500
Dominican Republic	National Biodiversity Strategy, Action Plan and First National Report to the CBD	230,000
Ecuador	National Biodiversity Strategy, Action Plan and First National Report to the CBD	289,300
Egypt	National Biodiversity Strategy, Action Plan and First National Report to the CBD	288,000
El Salvador	Formulation of the National Biodiversity Strategy, action plan and Report to the CBD	217,900
Equatorial Guinea	National Biodiversity Strategy, Action Plan and First Country Report to the COP	296,000
Eritrea	National Biodiversity Strategy, Action Plan and First National Report	275,000
Estonia	National Biodiversity Strategy, Action Plan and First National Report to the CBD	166,000
Ethiopia	National Biodiversity Strategy, Action Plan, Participation in Clearing House Mechanism for CBD, and Country Report to the COP	406,930
Fiji	National Biodiversity Strategy, Action Plan and Country Report to the COP	197,925
Gabon	National Biodiversity Strategy, Action Plan and Country Report to the COP	232,200
Gambia	National Biodiversity Strategy, Action Plan and First National Report to the CBD	243,000
Georgia	Biodiversity Strategy, Action Plan and National Report	120,000
Grenada	Development of a National Biodiversity Conservation Strategy, and Action Plan and Country Report to the CBD	133,520
Guatemala	National Biodiversity Strategy and Action Plan	214,700
Guinea	National Biodiversity Strategy, and Action Plan and Country Report to the COP	223,020
Guinea-Bissau	National Biodiversity Strategy, and Action Plan and Country Report to the COP	195,480
Haiti	National Biodiversity Strategy and Action Plan and First National Report to the CBD and Clearing House Mechanism	262,000

Country	Description	Estimated Cost (US $)
Honduras	Development of a National Biodiversity Conservation Strategy and Action Plan and Report to the CBD	258,000
Hungary	National Biodiversity Strategy and Action Plan and First National Report to the CBD	166,320
India	National Biodiversity Strategy and Action Plan	968,200
Indonesia	Indonesian Biodiversity Strategy and Action Plan (IBSAP)	438,600
Iran	National Biodiversity Strategy and Action Plan and Country Report to the CBD	350,000
Jamaica	Development of a National Biodiversity Conservation Strategy & Action Plan and Report to the CBD	192,832
Kazakhstan	Development of A National Strategy and an Action Plan to Implement the CBD and to prepare the First Report to the COP	132,664
Kenya	Biodiversity Strategy & Action Plan and First National Report to the CBD	157,000
Kiribati	National Biodiversity Strategy and Action Plan and Country Report to the COP	198,790
Korea DPR	National Biodiversity Strategy & Action Plan and Report to the COP	299,250
Kyrgyzstan	Biodiversity Strategy & Action Plan and National Report to the COP	108,000
Latvia	National Biodiversity Strategy, Action Plan and Country Report to the CBD	205,315
Lebanon	Biodiversity Strategy and Action Plan and Report to the CBD	145,000
Lesotho	National Biodiversity Strategy and Action Plan, and Country Report to the COP	114,480
Liberia	Liberia's National Biodiversity Strategy and Action Plan, and Country Report to the COP	256,000
Macedonia	National Strategy and Action Plan of Biological and Landscape Diversity, National Report, Clearing House Mechanism, and Assessment of Capacity Building Needs	371,500
Malawi	National Biodiversity Strategy, Action Plan and First National Report to the CBD	289,000
Malaysia	National Biodiversity Strategy and Action Plan, and Report to the COP	36,750
Maldives	National Biodiversity Conservation Strategy, and Action Plan and Country Report to the CBD	170,680
Mali	National Biodiversity Conservation Strategy, and Action Plan and Country Report to COP	252,180
Marshall Islands	National Biodiversity Conservation Strategy, Action Plan and Report to the CBD	265,000
Mauritania	National Biodiversity Conservation Strategy, Action Plan and First National Report to the CBD	233,000
Mauritius	National Biodiversity Conservation Strategy, and Action Plan and First National Report to CBD	235,440
Mexico	National Biodiversity Conservation Strategy, and Action Plan and Report to the COP	254,000

Country	Description	Estimated Cost (US $)
Micronesia	National Biodiversity Conservation Strategy, and Action Plan and Report to COP	281,000
Moldova	Biodiversity Strategy, Action Plan, and National Report	125,000
Morocco	Elaboration of a National Climate Change Strategy and Action Plan	140,000
Morocco	National Biodiversity Strategy, and Action Plan and First National Report to the CBD	191,200
Mozambique	National Biodiversity Strategy, and Action Plan and First National Report to the CBD	216,000
Myanmar	Development of the National Biodiversity Strategy and Action Plan (NBSAP)	250,000
Namibia	National Biodiversity Strategy, and Action Plan	242,200
Nauru	National Biodiversity Conservation Strategy and Action Plan and Report to the COP including Clearing House Mechanism	148,000
Nicaragua	National Biodiversity Strategy, and Action Plan and Report to the COP	252,247
Niger	National Biodiversity Strategy, and Action Plan and Country Report to the COP	229,500
Nigeria	National Biodiversity Strategy, and Action Plan and Country Report to the COP	313,740
Niue	National Biodiversity Strategy, and Action Plan and Report to the COP	134,930
Oman	Biodiversity Strategy and Action Plan and Report to CBD	266,000
Palau	National Biodiversity Strategy Action Plan and First Report to the COP	330,000
Panama	National Biodiversity Strategy, and Action Plan and Country Report to the CBD	215,000
Papua New Guinea	Biodiversity Strategy and Action Plan (resubmission)	182,000
Paraguay	Development of a National Biodiversity Conservation Strategy, and Action Plan and Country Report to the CBD	136,935
Peru	Strategy and Action Plan for the Conservation and Sustainable use of Biological Diversity in Peru	217,900
Poland	National Biodiversity Strategy, and Action Plan and Country Report to the CBD	205,000
Rwanda	National Biodiversity Strategy, and Action Plan and Country Report to the COP	170,640
Samoa	Preparation of National Biodiversity Strategy and Action Plan, and First National Report to the COP of the CBD	183,010
Sao Tome and Principe	Biodiversity Strategy, Action Plan and First National Report and Clearing House Mechanism	163,000
Serbia	Biodiversity Strategy, Action Plan and National Report (BSAP)	315,170
Sierra Leone	National Biodiversity Strategy and Action Plan, and Country Report to the COP	275,000

Country	Description	Estimated Cost (US $)
South Africa	Strategy on Access and Benefit Sharing of Genetic Resources (included in the Biodiversity White Paper)	90,000
Suriname	Formulation of a National Biodiversity Action Plan for the Implementation of the Nation Biodiversity Strategy	92,000
Syria	Biodiversity Strategy and Action Plan and Report to the CBD	234,000
Timor Leste	National Biodiversity Strategy Action Plan, the First & Third National Report to CBD, Establishment of Clearing House Mechanism	295,200
Togo	Biodiversity Strategy (CDB Togo)	263,800
Tonga	National Biodiversity Conservation Strategy Action Plan and First Report to the COP	358,000
Trinidad and Tobago	National Biodiversity Strategy, Action Plan and First Report to the CBD	127,000
Tunisia	Biodiversity Strategy, Action Plan and National Report	89,000
Turkmenistan	Biodiversity Strategy, Action Plan and National Report with Clearing House Mechanism	332,540
Tuvalu	National Biodiversity Strategy Action Plan, First and Third National Reports to the COP and CHM	242,000
Uganda	Biodiversity Strategy, Action Plan and National Report	125,000
Ukraine	Biodiversity Strategy, Action Plan, and National Report	112,000
Uruguay	Formulation of the National Biodiversity Strategy, action plan and Report to the CBD	121,300
Yemen	Biodiversity Strategy, Action Plan, and the Report to the CBD	290,000

Source: Various, including
GEF Project Funding (http://www.thegef.org/gef/gef_projects_funding);
ten Kate et al. (undated) Preparing a national strategy on access to genetic resources and benefit-sharing (http://teebforbusiness.earthmind.net/files/Preparing_a_National_Strategy_on_Access_to_Genetic_Resources_and_Benefit-Sharing.pdf);
Millenium Project, Preparing National Strategies to Achieve Millennium Development Goals: A Handbook (http://www.gm.undp.org/Reports/Preparing%20national%20strategies%20to%20achieve%20the%20MDGs.pdf)

4.3 Specific awareness raising activities

The sections below detail the estimated resource needs associated with the kinds of, potentially on-going or recurrent, activities that countries could choose to implement. Unlike the two activities described above, these are more of a “menu of options” for countries to consider in order to raise awareness (as opposed to the conducting a baseline survey and developing a national strategy which are, arguably, necessary preconditions for effectively raising awareness).

The options considered below include:

- Running workshops and / or conferences with key target audiences
- Running training programmes with key sectors
- Running high profile events
- Integrating biodiversity into education programmes
- Running a mass media campaign

4.3.1 Running workshops and / or conferences with key target audiences

Workshops and conferences are a key way to engage a specific audience. They would be particularly useful for engaging with, for instance:

- Key government officials;
- The media;
- Important stakeholders in different sectors (e.g. agriculture, forestry, manufacturing, etc); and,
- Communication multipliers (individuals / organisations who are able to disseminate messages to a wider audience).

It can be useful to conduct workshops both with a specific group of stakeholders, however it is also possible to run a workshop where a wide range of stakeholders are invited.

Workshops and conferences can also be organised and linked to high profile events or platforms such as the International Day on Biodiversity.

The resource needs for running a workshop / conference can vary significant, depending on the number of participants that are invited, whether their travel / accommodation is paid for, the type of venue that is used, the running time of the workshop (e.g. a half day or 2 days), etc.

For instance, assuming that it takes 5 days to prepare and organise a workshop, at a day rate of $1,000, the resource needs associated with preparing for a workshop amounts to $5,000. Other indicative costs are shown below, assuming 3 organisers, and then either 50 or 100 attendants for a 1 day workshop.

Table 4.3 Assumptions for estimating resource needs

	US $ per head	For 3 organisers	50 attendants	100 attendants
Travel	450	1,350	22,500	45,000
Accommodation	150	450	7,500	15,000
Subsistence	100	300		
Catering & venue hire	60		3,000	6,000
Total (excluding travel / accommodation for attendants)		2,100	3,000	6,000
Total (including travel / accommodation for attendants)		2,100	33,000	66,000

This suggests that a 1 day workshop in a higher income country can cost anything between $5,000 (assuming 50 attendants who pay for their own travel and accommodation) to almost $70,000 (assuming 100 attendants whose travel and accommodation are paid for). In some cases it may not be necessary to pay for the travel and accommodation of all participants, but just a select number of experts to secure their attendance (e.g. 5 – 10 individuals). Another $5,000 would then be necessary to account for the time associated with preparing and organising the workshop.

In a lower income country context, personal communication with the organisers of TEEB (The Economics of Ecosystems and Biodiversity*)* workshops have indicated that each workshop costs a minimum of $50,000 which would cover travel, accommodation, venue and catering costs. Any less than that amount is likely to compromise the number of people who attend (experience indicates that for countries with lower income, it is more important to cover travel and accommodation costs to boost attendance).

Assuming then that, for **higher income countries**, **the average resource needs for a workshop could be in the region of $15,000** (allowing for preparation time, three organisers, 50 attendants, of which 10 have their accommodation and travel paid for).

For lower income countries, the evidence suggests that the **resource needs per workshop would be a minimum of $50,000**.

Resource needs will then vary depending on the number of workshops that are organised. A high cost scenario could, for instance, involve two workshops a year until 2020, starting in 2015 (to allow for a population survey and a national strategy to be put in place. This would amount to 10 workshops. A low cost scenario could involve, for example, 3 workshops spread over the same period, or clustered together in one year (e.g. 2015).

Given 124 higher income countries, and 90 lower income countries, this suggests **global resource needs** could amount to **about $64 million in the high cost scenario,** or **$20 million in the low cost scenario.**

The high cost scenario is equivalent to $500,000 a year per country for lower income countries, and $150,000 per country for higher income countries. In the case of the low cost scenario, this is equivalent to $150,000 per country for lower income countries, and about $50,000 per country for higher income countries.

4.3.2 Running training programmes with key sectors

Given the significant impact that some stakeholders or sectors have on biodiversity, and also the potential role that some groups can play in reducing negative effects on biodiversity, specifically targeted training programmes can potentially have a significant impact on helping people understand the important of biodiversity, its value, and also how to use it sustainably.

Training programmes can, for instance, be targeted at certain sectors such as agriculture, where farmers can be trained in using sustainable agricultural methods and the importance and value of biodiversity to their livelihoods. Similarly, government officials can be trained in the use of national accounting systems which take into account the value of biodiversity.

Communication multipliers can also be trained, such as teachers and journalists, in the role and importance of biodiversity. These stakeholders can then use their training to educate or train others.

Training can be designed in a range of ways and based on a range of methods, from on-site face-to-face instruction, through to e-learning. Training can also include involved the development of videos or video games which can appeal to other audiences such as children or young adults (e.g. Interactive Media Instruction). Training programmes typically also involve the preparation of associated materials such as training guides or best practice documents.

Examples that have been identified of various training programmes and their associated costs are given in Table 4.4 below.

Table 4.4 Examples of training programmes and their associated costs

Country	Description	Cost (US $)
Thailand	Biodiversity Research and Training Programme, including 58 training programmes	2 million (35,000 per programme)
Poland	Training of various stakeholder groups, including police, farmers, as well as developing good practice guides for tourism, farmers, planners, fishermen and area managers	300,000
Malta	Information and communication campaigns for the proper use and management of nitrates in agriculture and livestock breeding, part of LIFE+, including training sessions for 2,550 farmers and 900 livestock breeders	1.5 million

Country	Description	Cost (US $)
Georgia	GEF funded Agricultural Research, Extension, Training (ARET) Project to reform on-farm agricultural and environmental practices	8 million
Various	Action Plan Training/Skills Building for 25 Least Developed Countries to assist with National Implementation Plan Development under the Stockholm Convention	2 million
Costa Rica, India, Fiji and Senegal	Support for Regional Oceans Training Programmes: establishing four regional centers that develop curricula and train scientists and officials from their respective regions. Participants in the training program jointly create intervention methodologies for later implementation in their countries of origin.	3.5 million (roughly 1 million per country)
Various	Climate Change Training Phase II - Training Programme to Support the Implementation of the UNFCCC, involving the preparation of 8 major training packages.	3.2 million (400,000 per training package)
Uganda	AIDS Support Organization training courses related to AIDS care and counselling that are offered to local and regional organisations. 11 courses are run	12,000 per course (600 per student)
USA	5 hour educational game on waste recycling	25,000
USA	Training videos for the military (1 hour)	65,000 – 75,000

Source: Thailand NBSAP, Poland NBSAP, ICF International, GEF project database.

Other examples of the resource needs required to develop different kinds of training are:[4]

- $1,000 to $3,000 per-finished-minute (PFM) of a professional video
- $200,000 for production of a standard (i.e. not using professional equipment) video
- $15 - $50 per slide for a professional training slides (i.e. powerpoint presentation)
- $25 - $150 per minute of professional audio tape
- $1,000 per hour of instructor-led training
- $10,000 per hour of standard e-learning
- $6,000 - $15,000 per hour of interactive multimedia instruction

It is clear from the evidence that the resource needs associated with developing and running training programmes can vary considerably depending on what methods are used, what scale they are implemented at, and the number of different audience types that they will attempt to reach.

Drawing on the available evidence, it seems that **$1 million per country** could be a reasonable allocation of resources for developing various training programmes, with enough flexibility for determining what form these should take and who they should be targeted at. **Global resource needs** (given 214 countries) would therefore amount to **roughly $210 million.**

Of course, countries could choose to allocate less than this, or significantly more. We could anticipate that a low cost scenario might therefore be $500,000 per country, while a high cost scenario could be more in the region of $10 million per country, if several training programmes were developed to target several different audiences using a range of different methods, and which were run over several years.

4.3.3 Running events which highlight the role and value of biodiversity

High profile events can help to raise awareness on huge range of different issues. Earth Day is one such example. One key benefit of events is that they can be designed to reach various types of audiences, including children, students, women, farmers, etc.

One of the most well-known examples related to biodiversity is the International Day for Biological Diversity (IDB), which is held every year on the 22nd of May. It was first introduced

[4] http://www.nwlink.com/~donclark/hrd/costs.html

in 1993 (although the date was originally 29th of December, which was then moved to the 22nd of May in 2000). An event such as the IDB provides a very visible platform for other national events to be organised. Linking events to the IDB can increase their profile, and promote the sense that there is "global action" taking place which creates a greater sense of solidarity. Workshops and conference (see Section 4.3.1 above) can also be linked to events which can increase their reach and effectiveness.

Some examples of events, and their associated costs, are given in the table below. The evidence indicates that the resource needs associated with running events can vary significantly.

Table 4.5 Examples of different events and their associated costs

Country	Name	Description	Cost (US $)
Various	International Day of Biodiversity	Funding from the Secretariat at the global level for producing and distributing materials to countries	15,000 – 20,000 per country (750,000 per year)
India	Science Express Train	Science Express - Biodiversity Special is an innovative and unique mobile exhibition mounted on a specially designed 16 coach AC train, which travelled across India from in 2012. Campaign has been organised since 2007. Since establishment, train has covered 68,000 km, attracted 6.3 million visitors and had 220 stops on the designated stations during 801 exhibition days. Target groups are: Students, Youth, Teachers, Women, NGOs, Voluntary Workers, Farmers, Rural Population, General Public, Social Workers, Industrial Workers.	400,000
Europe	Shell Eco-Marathon	Challenges high school and college student teams from around the world to design, build and test energy efficient vehicles. Included event organization, EU stakeholder and speaker identification and management of EU-wide media relations	250,000 – 500,000
China	WWF Earth Hour	Launched official EH website in China. Included celebrity engagement, media relations, press & public event management	100,000

Source: Various, including CBD Secretariat, ICF International,

On the basis of the available evidence, it seems that an indicative cost of **$200,000 per event** seems relatively reasonable, both in lower and higher income countries, to account not only for the resources needed for organising and running the event, and producing any associated materials, but also to account for the fact that each event would need to be accompanied with some level of promotional or PR activity. **Global resource needs per event** (given 214 countries) therefore amount to **roughly $40 million**.

In a **low cost scenario**, we could assume 1 event to be held each year to coincide with the IDB (i.e**.** $40 million per year) from 2015 to 2020 (to allow time for a national survey and national strategy to be put in place). The total global resource needs therefore amount to roughly **$210 million.**

In a **high cost scenario**, we could assume that 5 different events are held each year, potentially to coincide with the IDB and which target different kinds of audiences. This would therefore amount to $200 million per year (roughly $1 million per country). Over the 5 years, the total global resource needs would then be **$1 billion**.

Assuming this continues from 2015 to 2020 (to first allow a national survey to be conducted and a national strategy to be put in place), the global resource needs would amount to between $210 million - $1 billion depending on which cost scenario is adopted (between $1 million to $5 million per country)

4.3.4 Integration of biodiversity into education programmes

The importance of integrating biodiversity into education has long been recognised as playing an important role in achieving sustainable development.[5] The integration of biodiversity into education is also one of the key aims of CEPA's work programme. As a result, the CBD Secretariat and UNESCO are committed to working together to mainstream biodiversity within the Decade of Education for Sustainable Development.

There have been many examples in the past of issues being integrated into education, including health issues (e.g. HIV) as well as environmental issues (e.g. climate change). Drawing on experience from these should give a good indication of the resource needs associated with integrating biodiversity into education.

Personal communication with UNESCO on the pilot projects currently ongoing as part of the Decade of Education for Sustainable Development to integrate climate change issues into secondary education suggest that the resource needs for a medium sized, developing country (e.g. South Africa, Mauritius, Guyana) are around $100,000 – $500,000 per year. This is based on running a small number of capacity building workshops with Ministers of Education and adapting some education materials.

It was also noted that resource needs would increase for bigger countries and more decentralised countries. The required activities would also differ between developed and developing countries; in the case of the latter, more networking and capacity building would be necessary, as well as the development of new (rather than adaptation of old) materials.

Another estimate of costs associated with integrating biodiversity education into education was identified through the Polish NBSAP, which estimated that roughly $170,000 would be required for initiatives to raise awareness through the education / schooling system, as well as verification of the curricula for university school levels with regard to biodiversity.

The evidence suggests that it would seem a reasonable estimate for integrating biodiversity into education in an average **higher income country would be about $250,000 per year**, whilst a higher estimate of about **$500,000 for lower income countries** would be needed.

Given there are 124 higher income countries, and 90 lower income countries, this produces a **global annual resource needs of about $75 million**.

A high cost scenario would involve running such a programme to integrate biodiversity into education **for 5 years**, which would result in a **total global cost of about $380 million** ($2.5 million total costs per lower income country; $1.25 million per higher income country)

A low cost scenario could involve running such a programme for only **3 years**, which would result in a **total global cost of about $230 million** ($1.5 million total costs per lower income country; $0.75 million per higher income country).

4.3.5 Running a mass media campaign

A mass media campaign can be an effective way of reaching the wider public. However, resource needs will vary significantly depending on, for instance, what media is used (e.g. TV, radio, paper, digital), and what kind of coverage is sought (e.g. national, regional, local).

There are a wide range of examples of different media campaigns. Some of these, and their associated costs, are shown in Table 4.6 below.

[5] The United Nations Conference on Environment and Development (UNCED) (1992) Chapter 36 of the Agenda 21 is devoted to promoting education, public awareness and training

Table 4.6 Examples of media campaigns and their associated costs

Country	Name	Description	Type of activity	Cost (US $)	Source
Belgium	UNICA – Brazilian Sugarcane Industry Association	Communications campaign in support of uptake of biofuels in Europe's energy policy solutions. Stakeholder audit to assess perceptions of issues linked to biofuels	N/A	100,000 - 250,000	Weber Shandwick
Brazil	Sky Rainforest Rescue campaign – aims to protect rainforest in Brazil	To support the campaign, documentary maker Ross Kemp visited the Amazon Rainforest to investigate deforestation, for two programmes to be broadcast on Sky1 next spring	TV documentaries	6 million	http://www.mediaweek.co.uk/news/947345/
Bulgaria, Czech Republic, Hungary, Poland and Romania	"Be a Changer – You Control Climate Change" campaign	Continuation of the EC's campaign on climate change. Included launch events held to coincide with Work Environment Day. It was estimated that a total of 20.5 million should be reached through the 54.7million advertising spots using TV, online and outdoor advertising	Print, online, radio and TV	1.7 million	GHK Consulting
Estonia	Baltic Info Campaign on Hazardous Substances	The overall aim of the campaign is to strengthen the consumer demand in three Baltic States for products free of hazardous substances which involves for instance to inform users about specific hazardous substances and products which may contain them	TV, radio, leaflets, interactive video games, web-competitions	2.5 million	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf
Europe	European Year of Volunteering	Communication campaign as part of The Year to promote to volunteering by generating a critical mass of activities targeting volunteering and by promoting exchange of ideas and good practices.	N/A	1.8 million	http://ec.europa.eu/dgs/education_culture/evalreports/civilsociety/2009/year2011_en.pdf (see page 16)
Europe	European Year of Intercultural Dialogue	Communication campaign as part of the Year to promote the fundamental principles of the European Union	N/A	5.5 million	http://ec.europa.eu/dgs/education_culture/evalreports/culture/2005/year2008/Year2008anx_en.pdf (see page 13 and 26)
Europe	Community's Action Programme to promote bodies	Awareness raising activities as part of an initiative to extend and deepen knowledge of the building of Europe or contribute to common policy objectives	N/A	2.7 million	http://ec.europa.eu/dgs/education_culture/evalreports/education/2007/activereport_en.pd

Country	Name	Description	Type of activity	Cost (US $)	Source
	active at European level and support specific activities in the field of Education and Training	in the field of education and training, both inside and outside the Community			f (see page 17)
Europe	European Year of Education through Sport	Promotion of sport as a part of formal and informal education and the mean to increase the social integration. Communication campaign included a competition for new logo of the initiative, a media strategy, and promotional materials	N/A	2.8 million	http://ec.europa.eu/dgs/education_culture/evalreports/sport/2005/aees/aeesrep_fr.pdf (see page 12)
Finland	Promoting sustainable Salmon fishing practices on Lake Saimaa, part of LIFE+	The project's general objective is to maintain the genetic diversity of the valuable salmon populations in Lake Saimaa and to improve their vitality with an information exchange and negotiation process that aims to promote sustainable fishing practices.	Press releases, local media, information website	450,000	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf
Germany	VdZ (Forum for Energy Efficiency)	Public relations and education campaign	N/A	250,000 - 500,000	Weber Shandwick
Kenya	Strategy on Plastic Waste Management for the City of Nairobi	Types of activities: Awareness campaign, stakeholders trained in each division, NGOs, civil society and youth groups, preparation of posters, radio programs prepared and presented, etc.	Print, radio	400,000	http://www.unep.org/roa/Portals/137/Docs/pdf/PlasticWasteStrategy_Nairobi.pdf (p. 35)
Netherlands	Newsletter Emissions Trade – electronic newsletter	Monthly electronic newsletter on emissions trading (CO2 and NOx) in the Netherlands, for a target audience of some 2000 stakeholders: ETS participants, (local) authorities, consultants. It informs about all relevant policy issues and important developments on the Dutch market and beyond (EU, global). The newsletter is a journalistic and authoritative product, issued by the Ecofys editor's staff since 2003 until present.	Print	50,000 / yr	ICF International
Poland	National awareness raising campaign 'Discover your nature' , part of LIFE+	The main goal of the project is to improve awareness and appreciation about Natura 2000 among Polish citizens. Press campaign aimed to reach 1 million citizens.	TV films, press campaign	2.5 million	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf

Country	Name	Description	Type of activity	Cost (US $)	Source
Slovenia	Live Water – from Biodiversity to the Tap	The project's main objective is to improve public awareness in Slovenia about the importance of protecting and conserving freshwater ecosystems	Digital, social media, press, surveys, workshops, events	650,000	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf
Slovenia	Raising awareness of the importance of environmentally sound management of the WEEE among identified target groups in Slovenia	The Slovenia WEEE campaign project aims to raise awareness of the handling, treatment and recovery - including reuse and recycling - of WEEE across all the municipalities in Slovenia. Special emphasis is placed on households and school children	Information campaign, didactic materials, website, competitions	700,000	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf
Spain	Boosting Land Stewardship as a conservation tool in the Western Mediterranean Arch; a Communication and Training Scheme	The project aims to convey the value of land stewardship among biodiversity conservation stakeholders at European level (specially the Western Mediterranean Arch), and to encourage its use and application	Audio & video media, press, workshops	2 million	http://ec.europa.eu/environment/life/publications/lifepublications/compilations/documents/infcompilation10.pdf
Thailand	'Travel with a New Heart for Sustainable Thailand' – Tourism Authority of Thailand (TAT)	Campaign aiming to encourage tourists to look after tourists destinations and their environment	N/A	600,000	http://thailandtravelupdate.com/ new-tat-campaign-urges-environmental-protection
Thailand	'Travel with a New Heart for Sustainable Thailand'	Campaign by the Tourism Authority of Thailand (TAT) aiming to encourage tourists to look after tourists destinations and their environment	N/A	600,000	http://thailandtravelupdate.com/new-tat-campaign-urges-environmental-protection
UK	The Nag	An online campaign website which promotes positive actions. The Nag site supports online discussion, mapping, voting, wikis and automated monthly e-mail reminders. Received an international award as the best ethical website.	Digital / Social media	90,000	http://www.socialbysocial.com/book/nag
USA	Heart Stopper – Smoking and Health Video Campaign	Development of Heart Stopper, a public service announcement that shows what smoking can do to the human body. Heart Stopper has aired 7,838 times in 96	Public service announcement TV commercial	4.3 million	ICF International

Country	Name	Description	Type of activity	Cost (US $)	Source
		markets, receiving $8.42 million worth of air time and reaching an estimated 39 million viewers.			
USA	Stop Smoking Marketing and Education Campaign	The development, implementation, and evaluation of a marketing and education campaign to promote tobacco cessation. Involved two-market, four-installation print and radio advertising pilot campaign which were refined for the national rollout. The rollout involved Web marketing; presented at relevant conferences; established strategic partnerships with professionals in health promotions, dentistry, and other disciplines; and developed creative for media and outdoor advertising. Also involved a public service announcement video.	Print, radio, public service announcement video, digital	5.7 million	ICF International

The available evidence indicates that costs associated with a mass media campaign can vary significantly depending on what tools are used, the length of time the campaign is run for and what kinds of audiences are targeted (e.g. a specific stakeholder group or the wider public).

Personal communication with a contact involved in the marketing of the TEEB initiative suggested that US $400,000 could fund a national campaign on a single issue for about 3 months, which would include engagement of a marketing agency, advertising costs and the costs of producing associated materials.

However, a campaign is likely to be ineffective unless it is repeated or run over a sufficient period of time (a single campaign is unless to have any long-lasting impact). A campaign would therefore need to be run three or four times a year, which could increase costs to roughly US $1.5 million per year. This cost is likely to be somewhat different in lower income countries, where a greater reliance would have to be placed on, for example, radio and print media, and less on digital or TV media. It is likely that administration and management costs will also be less. We have therefore assumed that in this context, $750,000 a year may be sufficient for a basic communication campaign to be implemented.

This seems roughly in line with the examples identified above, where the average cost of a campaign seems to be roughly US $2 million (although some of the campaigns were run over varying time periods and were based on different approaches).

The evidence suggests that a relatively conservative estimate for running a mass media communication campaign may be **in the region of US$1 million a year, with US$1.5 million for higher income countries, and US$750,000 for lower income countries**.

Given 90 lower income countries and 214 higher income countries, global resource needs per year are therefore likely to be amount to about **US$250 million**.

A mass media campaign could be run twice in the period between 2015 – 2020. For instance, one could be developed for release in 2015, which could be informed by the results of the public survey on awareness and following the development of a national survey. Another campaign could then be implemented in 2018, which could be developed to suit different needs or to build on the campaign that had run previously.

Running an annual campaign twice during this period would therefore mean total resource needs for a higher income country of **US$3 million** and **US$1.5 million** for a lower income country, totally **US$500 million** for all countries.

However, there is considerable scope to adjust these costs depending on the specific needs and priorities of a country's context. Resource needs can therefore be adjusted around this figure.

In a low cost scenario, resource needs could, for instance, be reduced to US$750,000 a year in a higher income country or US$500,000 in a lower income country. This could be done, for instance, by reducing the number of times a year the campaign is run. However, a more effective approach would be to target fewer groups in the media campaign and still running it often rather than reducing exposure (retention is one of the most important factors in ensuring a media campaign is effective, and repetition is one of the key means of ensuring that messages are retained). Running an annual media campaign twice in this scenario would result in global resource needs of **US$275 million.**

In a high cost scenario, resources could be increased significantly. These could, for instance, easily double and go up to US$3 million a year in a higher income country and US$1.5 million in a lower income country. This would enable a greater number of tools to be used and for the campaign to have a much wider reach. This would result in global resource needs of **US$1 billion.**

5 RESULTS

5.1 Overview of the results

This section presents an overview of the results, broken down by investment needs and on-going, recurrent expenditure.

It should be noted here that **training programmes** as an activity is closely linked to several other Aichi Targets, as delivering on some of these targets may require specific training programmes to be implemented which educate sector-specific audiences (e.g. farmers, fishermen).

We have therefore taken out the resource needs associated with training programmes from the global assessment, and included them in a separate section to avoid duplication (see Section 5.1.3). We will re-assess how to deal with this, and whether this is necessary, once the method and results from the other Targets have been considered.

5.1.1 Investment needs

In order to build capacity and establish the right framework and enabling conditions for an awareness campaign to be designed and implemented, the following two activities need to be completed:

- Conducting a baseline survey of public awareness
- Preparing a national strategy for raising awareness on biodiversity

A summary of the estimated resource needs associated with these are given in Table 5.1 below.

Table 5.1 Estimated investment needs for raising awareness

Activity	Unit cost per country (US $)		Global cost (US $)
	Per higher income country	Per lower income country	
Baseline survey	10,000	30,000	4 million
Strategy	250,000	250,000	54 million
Total	260,000	280,000	**58 million**

Source: GHK analysis

NB: assuming 90 lower income countries and 214 higher income countries in the world, based on the World Banks classification system (see Section 3.1.3).

5.1.2 Recurrent expenditures

Recurrent expenditure has been calculated on the basis of assessing the resource needs associated with 5 further activities. Not all countries will choose to implement all of these activities, or to implement them on a recurrent basis so some of these may not be applicable, or count as on-going expenditures in some country contexts.

The national strategy that is developed should help to inform what activities are most suitable and how often they should be implemented.

Assumptions have therefore had to be made to develop a high and low cost scenario. These are shown in 0. First however, the unit costs are presented below in Table 5.2.

High and low cost scenarios have been developed on the basis of certain assumptions. These assumptions are given in 0 below. For some of the activities (workshops, events, integration of biodiversity into education), the assumption has been made that they will not being until 2015 to allow time for the initial baseline survey of awareness to be conducted and for a national strategy to be developed which will inform the design and implementation of the campaign.

The estimated expenditure for the high cost scenario is given in Table 5.4, and the low cost scenarios in Table 5.5.

Table 5.2 Estimated recurrent expenditures - unit costs

Activity	Unit	Unit cost per country (US$)		Global cost (US$)
		Per higher income country	Per lower income country	
Survey	Per survey	10,000	30,000	4 million
Workshops	Per workshop	15,000	50,000	6 million
Events	Per event	200,000	200,000	40 million
Integration into education	Per year	250,000	500,000	75 million
Mass media campaign	Per year	1,500,000	750,000	250 million
Total		2 million	1.5 million	**380 million**

Source: GHK analysis

Table 5.3 Assumptions for developing high and low cost scenarios

Activity	High cost scenario assumption	Low cost scenario assumption
Survey	2 additional surveys conducted, once to gauge progress and to inform and adapt, where necessary, the on-going awareness campaign (e.g. 2016) and once again at the end of the target period to measures results (2020). (Total surveys, including baseline survey = 3)	1 additional survey conducted at the end of the target period (2020) to assess outcomes. (Total surveys, including baseline survey = 2)
Workshops	2 workshops per year for 5 years (2015 – 2020). Total workshops = 10.	3 workshops spread over 5 years, or clustered together in one year (2015 – 2020). Total workshops = 10.
Events	5 events each year for 5 years (2015 – 2020), potentially to coincide with the International Day for Biodiversity and to target different audiences.	1 event per year for 5 years (2015 – 2020), to coincide with the International Day for Biodiversity.
Integration into education	Programme of integration to run for 5 years	Programme of integration to run for 3 years
Mass media campaign	Estimated annual resource needs for a mass media campaign are doubled. Assuming 2 media campaigns are run (one in 2015, and one later down the line which can then be adapted in light of any changing needs, e.g. in 2018)	Estimated annual resource needs for a mass media campaign are roughly halved. Assuming 2 media campaigns are run (one in 2015, and one later down the line which can then be adapted in light of any changing needs, e.g. in 2018)

Table 5.4 Estimated recurrent expenditures – high cost scenario

Activity	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ million)
Survey	0.02	0.06	8
Workshops	0.15	0.5	64
Events	5	5	1,000
Integration into education	1.25	2.5	380
Mass media campaign	6	3	1,000
Total	12.4	11	**2,500**

Source: GHK analysis

NB: assuming 90 lower income countries and 214 higher income countries in the world, based on the World Banks classification system (see Section 3.1.3).

Table 5.5 Estimated recurrent expenditures – low cost scenario

Activity	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ million)
Survey	0.01	0.03	4
Workshops	0.05	0.15	20
Events	1	1	210
Integration into education	0.75	1.5	230
Mass media campaign	1.5	1	275
Total	3.3	3.7	**750**

Source: GHK analysis

NB: assuming 90 lower income countries and 214 higher income countries in the world, based on the World Banks classification system (see Section 3.1.3).

Table 5.6 below summarises the recurrent expenditures associated with the unit cost, high cost, and low cost scenarios for a higher income country and a lower income country, as well as the global costs.

Table 5.6 Summary of total costs associated with all recurrent activity expenditure

	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ billion)
Total expenditure per unit cost	2	1.5	**0.38**
Total expenditure - high cost scenario	12.4	11	**2,500**
Total expenditure – low cost scenario	3.3	3.7	**750**

Source: GHK analysis

5.1.3 Training programmes – separate needs assessment

We have removed training programmes from the global, overall assessment of resource needs as there is a risk that this overlaps with the work being undertaken by other Targets. In order to avoid duplication, we have therefore separated the assessment on training programmes.

The results are summarised below, with the assumptions associated with the developing the high and low cost scenario being presented in Table 5.7 and a summary of the resource needs being presented in Table 5.8.

Once the methods and results from the other Targets have been considered, we will re-assess how to deal with the needs assessment on training programmes.

Table 5.7 Assumptions for developing high and low cost scenarios

Activity	High cost scenario assumption	Low cost scenario assumption
Training programmes	Flexibility for a greater number of programmes to be implemented, a greater number of audiences to be targeted and a greater number of tools to be used.	Limited number of programmes / target audiences

Table 5.8 Estimated recurrent expenditures – low cost scenario

Activity	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ million)
Unit cost	1	1	210
High cost scenario	10	10	2,000
Low cost scenario	0.5	0.5	110

Source: GHK analysis

NB: assuming 90 lower income countries and 214 higher income countries in the world, based on the World Banks classification system (see Section 3.1.3).

5.1.4 Summary of total resource needs

Considering both investment needs and recurrent expenditure, suggests that the global resource needs are roughly between US$1 billion and US$5 billion, as shown in Table 5.9 below (excluding resource needs for implementing sector specific training programmes).

Per country, resource needs could vary from roughly US$4 to US$23 million for a higher income country, and from about US$5 to US$21 million for a lower income country.

Table 5.9 Summary of total costs associated with all recurrent activity expenditure

	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ billion)
Upfront investment needs	0.26	0.28	0.06
Recurrent expenditure - high cost scenario	12.4	11	2.5
Recurrent expenditure – low cost scenario	3.3	3.7	0.75

	Per higher income country (US $ million)	Per lower income country (US $ million)	Global cost (US $ billion)
Total (high cost scenario)	12.7	11.3	2.7
Total (low cost scenario)	3.6	4.0	0.8

Source: GHK analysis

5.2 Country needs assessment for Target 1

Only six countries have submitted a country needs assessment which estimates the resource needs for delivering the Aichi Targets. Estimates resource needs for delivering Target 1 are shown in Table 5.10 below.

From the small sample, the total resource needs are estimated to be between US$2 million and US$7 million over the ten year period between 2011 and 2020.

This compares well with the estimated resource needs per country in the low cost scenario summarised above, which shows an indicative cost of US$3.6 million for a higher income country and US$4 million for lower income countries. This sits in the middle of the range of (limited) estimates identified from the individual country needs assessments.

Table 5.10 Country needs assessments for Target 1

Country	Total Amount Needed for 2011-2020 (US$ million)
Brazil	Not specified
Bangladesh	4
Ecuador	7
Grenada	2
Micronesia	2.5
Myanmar	Not specified

Source: CBD Secretariat

5.3 Additional resource needs

Nearly all Parties indicate in their fourth national reports that they are undertaking actions related to education and public awareness. This illustrates the fact that there are a number of efforts already ongoing to raise awareness.

It is clear however that further efforts are needed to increase overall public awareness of biodiversity. Moreover, the scale and the extent of the current investment is unclear. This makes it difficult to determine what would be the additional expenditure required above and beyond existing efforts.

For the final stages of this assessment, we will attempt, as far as possible, to arrive at some view of the additional expenditure required to raise awareness. We will do so by using the National Reports Analyzer (https://www.cbd.int/reports/analyzer.shtml), focusing especially on responses to Questions 7, 80, 91 – 97, and 182. We will look at both the quantitative results as well as the qualitative results by going through the comments.

It is likely that the additional effort will differ across countries / regions. We will therefore try to take this into account by analysing the reports according to the CBD regional groups and / or Global Economic status.

This part of the analysis however is likely to be qualitative rather than quantitative, given the general lack of any expenditure data associated with responses to these questions.

6 DISCUSSION

The results indicate that the global upfront investments needs for raising awareness is about US$600 million, whilst the on-going expenditure requirements amount to between, roughly, US$1 billion and US$3 billion.

The confidence levels associated with the different estimates and activities vary. There are also varying gaps in the evidence. These are summarised in Table 6.1 below.

Table 6.1 Confidence levels and gaps associated with estimated expenditure of the different activities

Activity	Confidence levels associated with estimated expenditure	Gaps in the evidence and further research needs
Strategy	**HIGH** A considerable amount of relevant evidence was available to estimate the average cost of developing a national strategy a high level of confidence. Moreover, there are relatively few variables that could influence the resource needs (largely staff costs, staff time, and the extent of the stakeholder consultation that is conducted to inform the strategy).	None
Survey	**MEDIUM** A sufficient amount of relevant evidence was available to estimate the average cost of conducting a survey in different country contexts, with a reasonable level of confidence.	More accurate estimates could be developed if market research companies were contacted, who could then assess country-specific needs, methods and costs (e.g. IPSOS).
Workshops	**MEDIUM** There is a reasonable level of confidence associated with the assumptions made to estimate the cost of a workshop in a higher income country. For lower income countries, there is a reasonable level of confidence that past experience is a good indication of potential future costs. However, there are a considerable number of variables that could influence the costs of a workshop depending on its design which could significantly alter the resource needs.	More work could be done to better understand the variables which can influence the cost of a workshop, and how these vary in different country contexts. However, there is a limit to how much can be done as workshops will have to be designed to suit specific needs, which cannot be determined a priori and will depend on what is decided are the priorities in the national strategy.
Training programmes	**LOW** Although some evidence was identified on which to base estimates of resource needs, there are a significant number of variables that could influence the costs of a training programme. Therefore the cost of running training programmes in different countries could only be estimated with a limited degree of confidence.	More examples of training programmes and their associated costs could be identified. A better understanding of the different variables which influence the costs of training programmes, and the way in which they influence costs would be useful. However, there is a limit to how much can be done as training programmes will have to be designed to suit specific needs or specific audience types, which cannot be determined a priori and will depend on what is decided are the priorities in the national strategy.
Events	**LOW** It proved difficult to identify the costs associated just with running specific	More examples of events and their specific costs could be identified. A better understanding of the different

Activity	Confidence levels associated with estimated expenditure	Gaps in the evidence and further research needs
	events (in most cases these costs were subsumed within others as part of a wider awareness raising campaign). There is therefore a limited amount of evidence on which to base the estimated resource needs. Moreover, there are a number of variables which can influence the cost of an event.	variables which influence the costs of events, and the way in which they influence costs would be useful. However, there is a limit to how much can be done as events will have to be designed to suit specific needs or specific audience types, which cannot be determined a priori and will depend on what is decided are the priorities in the national strategy
Integration into education	**MEDIUM** The estimate is based on on-going experience by UNESCO in integrating environmental issues into education and therefore can be translated to the integration of biodiversity into education with reasonable levels of confidence.	More information can be obtained from UNESCO with regard to other programmes of integrating issues into education (e.g. health).
Mass media campaign	**LOW** Although many examples of media campaigns were identified, associated costs vary significant. The resource needs for conducting a media campaign can be affected by a whole range of variables, making it very difficult to arrive at a "general estimate" of the associated costs.	More work could be done to arrive at average estimates for the costs associated with specific types of activities, e.g. TV, radio, audio, press, digital. However, without a better understanding of the specific needs, target audiences and purposes of a mass media campaign, it will be very difficult to improve on the estimated costs. There is, therefore, a limit to improving the estimates of resources needs, until a national strategy is put in place which will inform its design and implementation.

6.1.2 Additional considerations

It should be noted that the assumptions made here on resource needs are largely related to the income of a country. There are a whole range of other factors, however, which may also affect the resource needs of a country with regard to raising awareness, or which activities may be most suitable.

For instance, the resource needs of a country may also differ depending on, for instance:

- its population size (i.e. which can increase the costs of a mass media campaign if more people have to be reached);
- its economic structure (e.g. a country which relies on tourism and therefore is closely linked to biodiversity may already have a good level of awareness on the importance and value of biodiversity);
- whether a country is decentralised or centralised (e.g. a decentralised country may require greater resources as activities may need to be adapted or discussed at different levels);
- existing institutions and infrastructure (e.g. with regard to educational materials and means for integrating new issues into the national curriculum).

Moreover, different activities may be better suited to different kinds of countries. For instance, in a country where very few sectors have a very significant impact on biodiversity, a targeted campaign with workshops and training programmes targeted at those sectors may be more useful than a mass media campaign, which may actually be unnecessary.

Consequently, although the needs assessment presented above estimates the total costs associated with implementing all of the activities specified, this may not be useful or necessary in some countries.

The actual costs may therefore be much less (e.g. if fewer activities are necessary), or much more (e.g. if more activities are implemented or fewer activities are necessary but need to be implemented on a much larger scale).

It is best therefore to treat the needs assessment as a "menu" of costed options that provide indicatives costs of different activities. These can then be combined or adapted to suit the needs of each country's context.

6.1.3 Next steps for the analysis

We will work on improving the estimated resource needs of the following activities:

- Integration into education: we will continue to liaise with relevant officials in UNESCO to identify whether there is additional experience we can draw on, e.g. with regard to integration of health concerns into education
- Mass media campaigns: we will continue to try to identify further examples to better understand how different variables affect the estimated resource needs. We will be contacting marketing firms such as Saatchi & Saatchi (who were involved in marketing TEEB).

We will also continue to look into further examples from across the world to improve the estimates associated with the other activities, by continuing to carry out desk research and by following up with relevant individuals on identified examples where no information on costs could be found.

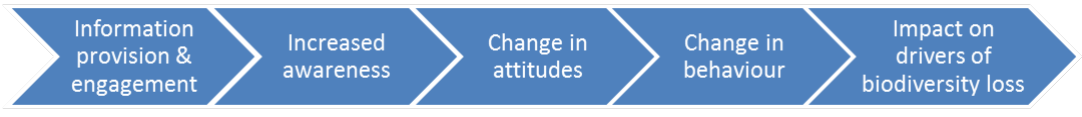
We will also:

- Assess NBSAPs to better understand existing activity to raise awareness and therefore develop a qualititaive understanding of the extent of the additional resources that may be required to raise awareness
- Assess the benefits associated with delivering higher awareness on biodiversity, but also to better understand other aspects which may be necessary to translate this awareness into behaviour changes.
- Consider the different funding sources that could be used for funding these kinds of activities.

6.2 Benefits of delivering the Target

Raising people's awareness can potentially have significant benefits, if this translated into a change in attitudes or changes in behaviour (see Figure 6.2).

Figure 6.2 Links between awareness, attitudes, behaviour and biodiversity loss



Although it is clear that awareness is a crucial, and often necessary, component in reducing the drivers of biodiversity loss, this diagram does illustrate the number of links, and therefore the number of assumptions, associated with expecting engagement and information provision to result in reduced pressures on biodiversity loss.

A caveat should therefore be made clear from the outset. Despite obvious benefits, increased awareness from information provision and engagement does not *necessarily* lead to changes in attitudes or behaviour. Much will also depend on enabling factors such as social influences and having the necessary infrastructure available to support the desired

behaviour change. Once awareness has been raised, therefore, efforts will also need to be made to ensure that behaviour change is supported once awareness has been raised.

The benefits associated with raising awareness will be discussed in more detail for the final report. The discussion will also consider caveats to this, such as the need for increased awareness to also be accompanied with the necessary enabling factors or appropriate infrastructure, and other relevant issues.

6.3 Funding opportunities

There is, potentially, considerable scope for innovative funding sources to be used in some of the awareness-raising activities discussed above. Hence while some activities might seem expensive (e.g. involving a widespread and comprehensive mass media campaign), not all of these costs would have to be borne by public agencies. The scope for partnerships in this area is considerable, both through working with private companies (e.g. through sponsorship) and through coordinating efforts with NGOs. There are, for instance, a number of existing examples (e.g. between Danone and RAMSAR in terms of funding for wetlands) which illustrate the potential for, and benefits of, these kinds of partnerships.

Moreover, in the case of “social advertising” (i.e. the promotion of issues that are relevant for society as a whole), it is often possible to negotiate considerable media discounts or additional cost-free advertising slots with the media. In some media, social advertising is entirely free of charge. There are, therefore, a range of options to consider which may reduce the costs of awareness raising activities.