Chapter 16

Communication, Public Awareness and Outreach

Action to foster biodiversity is urgently needed, and that requires politicians – and thus the wider public – to understand the significance of the changes taking place. This can be a complex message to communicate. The issue is not whether it is worth conserving a charismatic mammal or whether it matters if a few nematodes become extinct: it needs to be far more widely understood that declines in individual species herald the decline of diversity in whole ecosystems, which, in turn, has implications for human survival (Richard Lane, New Scientist, September 2009).

Aim of this chapter

Crop wild relatives (CWR) represent a significant body of neglected and threatened species whose importance is, with rare exception, poorly appreciated. This lack of appreciation of the value of CWR, the threats they face and their critical role in food security and ecosystem health is one of the greatest challenges facing their *in situ* conservation. This has resulted in a general lack of interest by the public, low commitment and political will by policy-makers, which translates into low priority and minimal conservation action at the country level.

Clearly, we are at a critical crossroads for CWR. We know the threats undermining their survival are intensifying and from limited studies we know that a significant number of CWR species are threatened with extinction as a consequence of changing climate. The outlook for CWR as the bedrock for agriculture in securing and sustaining food production and security is bleak if action is not taken soon. While the future may be hazardous, it is important to understand that these scenarios present key opportunities for the CWR community to make the case for increased attention to be given to CWR conservation through strengthened advocacy and communication efforts.

Effective communication strategies must play a part in changing the attitudes of key audiences about CWR and are critical to the overall success and sustain-

ability of conservation efforts. In developing such strategies, clarity of message and clear definition of target audiences are essential. A well-planned communication strategy can ensure that the right messages and results reach those people and institutions that are in a position to influence the conservation policies and practices around CWR. It is the aim of this chapter to help practitioners think more strategically about communications, to introduce the range of available communications tools, and to explore the means for measuring communications impact. The body of knowledge on communications is substantial and the reader is directed to relevant sources. Recognizing the limitations of what can be presented in a single chapter of this nature, the authors hope that, at the very least, it presents some 'food for thought' on a critical, but often neglected, cross-cutting area vital for successful conservation.

The importance of communication

Taking action to change attitudes is probably the most reliable way to influence a change in behaviour over the long term. If the goal is the *in situ* conservation of CWR, the behaviour we wish to change is anything that prevents this goal from being reached. It might be that policies are in place that prevent – or at least do not support – the conservation and use of CWR in a given country or locality. It might be that people do not value CWR, viewing them as weeds or animal fodder. In this case, people probably do not know the role that wild relatives can play in improving agricultural productivity and food security or the functioning of the habitat in which they live.

These are only some of the possible constraints to conservation. Almost certainly there are others and it is probable that these will vary from place to place. But taking the above examples as indicative, and assuming that attitude change does in fact influence behavioural change, at least two things need to happen before these constraints can be removed:

- 1 Policy-makers and the people and institutions that influence policy (the socalled 'agents of change') must be convinced of the need to put into place policies, strategies and incentives to support the conservation of CWR.
- 2 Scientific institutions need to be convinced of the value of putting measures into place to conserve CWR.

Changing attitudes is not a quick or easy business. It is not likely to be accomplished with a single conversation, let alone a fact sheet, poster or even media mention. Changing attitudes on the scale necessary to achieve an impact that will ensure the conservation of CWR wherever they are at risk requires capacity, resources and a long-term institutional commitment. It will also require a comprehensive profile of the people who hold the key to ensuring that we meet our strategic goals, the best way to approach such people, and the means and messages most likely to compel them to change their attitudes. These factors will

Rising to the challenge

In many biodiversity-rich countries, the forces promoting biodiversity conservation are rarely consolidated and powerful enough to influence major policy decisions in favour of effective conservation policies. In most cases, government agencies do not play an effective enough leading role for biodiversity conservation for reasons already highlighted in this manual, including lack of political will, inadequate funding, low technical capacity, inappropriate policies and mismanagement of available resources. This gap in effective leadership means governments remain a significant impediment to achieving real progress in the implementation of international agreements such as the CBD and ITPGRFA, including promoting and enhancing CWR in situ conservation. Another issue in some countries is that the responsibility for biodiversity conservation within the context of the CBD lies with the Ministries of Environment, which sometimes tend to consider agriculture as detrimental to biodiversity rather than highly dependent on (agricultural) biodiversity. The result is that agricultural biodiversity does not receive the attention it merits at the CBD level. In addition, Ministries of Agriculture, which do have responsibility for agricultural biodiversity, do not always communicate well with their counterparts in the environmental sector (and vice versa); consequently, important opportunities may be lost.

However, even with limited resources, governments can support community education and awareness initiatives by making use of networks and organizations in their countries, as well as those existing regionally and globally. Carefully targeted awareness and education programmes can enable communities to protect and conserve the natural heritage in their local environment on which their cultures and livelihoods depend.

Source: adapted from Communication, Education and Public Awareness: A Toolkit for National Focal Points and NBSAP Coordinators, http://69.90.183.227/cepa/toolkit/2008/doc/CBD-Toolkit-Complete.pdf

tend to vary from place to place. In the case of CWR, it is likely that the individuals and institutions that can influence their conservation status will be relatively limited in number in each country. It makes sense to focus efforts on reaching this small audience rather than undertaking a broad-based campaign targeting the general public, whose support would be hard won, expensive and, in the end, probably not all that helpful.

At the global level, communicating information about CWR might help to achieve the recognition they merit in the global policy arena and also the financial support required from donors and relevant agencies. Organizations such as Bioversity International, the Food and Agricultural Organization of the United Nations (FAO) and the International Union for the Conservation of Nature (IUCN) routinely work in global forums and with international agreements such as the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the Convention on Biological Diversity (CBD) which are policy instruments that address CWR. A visible presence in global forums where relevant issues are addressed will help to ensure that CWR receive due considera-

The Climate Project

A recent study of The Climate Project (TCP) concluded that TCP presentations have had marked effects on public attitudes about climate change. The report found that those who previously did not identify as 'environmentalists' underwent the greatest mental shift, becoming more likely to support emissions reduction and to reduce their carbon footprints. Moreover, the evaluation suggested that TCP, an international nonprofit organization founded by former Vice President Al Gore, has created a new, unique environmental movement by customizing its message to the region and community.

People who attend TCP talks were found to be more likely to change their behaviour on behalf of the environment after watching the presentation, based on the slideshow presented by AI Gore in the film *An Inconvenient Truth*. According to the study, if this intention translates into simple actions with households, such as changing incandescent light bulbs to energy-efficient bulbs, presentation attendees would reduce carbon emissions by 569,755 tons annually – the approximate equivalent of taking 109,702 passenger cars off the road each year.

The Climate Project's efforts have not only affected audiences, but also the presenters themselves. As a result of their work with TCP, presenters committed to changing their lifestyles to conserve energy and reduce their environmental impacts. Collectively, presenters cut their personal carbon emissions by an estimated 30 per cent. The presenters also reported that climate change became an important factor when voting and making investment decisions, a direct result of their work with TCP.

Source: TCP News; http://www.theclimateprojectus.org/tcpnews.php?id=1249

tion; however, interventions must be strategic and innovative if they are to successfully compete for attention with a long list of other conservation needs and priorities.

One arena where people have been effective in changing attitudes and shaping actions is that of climate change. There is much that the biodiversity community can learn from the climate change arena about how to communicate the right messages to the right audiences. The Climate Project, highlighted in the box above, demonstrates particularly well the power of communications to influence both attitudes and actions.

Developing a communications strategy

In a world where more and more people are experiencing information overload, it is especially important to understand how to communicate effectively. Policymakers and other influential people receive a constant stream of information on various subjects from many different sources. Spending large amounts of money on a glossy brochure is not sensible if the brochure is immediately placed in the trash or sits unread on a shelf. Having more information products does not neces-

Box 16.1 Find a helping hand

Agriculture and biodiversity specialists frequently find it difficult to move out of their scientific mindset, which is required in order to understand the diversity of perceptions and opinions that exist among different stakeholders. For this reason, it is good practice to seek professional help and guidance from communication specialists when developing a communications strategy. The expertise of communication and social science professionals is increasingly available through networks that share and exchange expertise across various sectors. Examine other projects or initiatives in your country that have resulted in significant attitudinal and behavioural change. How was this achieved? What approach was used? How did they plan and organize?

Source: adapted from Communication, Education and Public Awareness: A Toolkit for National Focal Points and NBSAP Coordinators, http://69.90.183.227/cepa/toolkit/2008/doc/CBD-Toolkit-Complete.pdf

sarily translate into more action, outcomes or results. A better strategy might be to engineer a face-to-face encounter with an important and influential individual. The key word is strategy. No communications intervention should ever be undertaken without serious consideration of objectives, targets and audiences. *It is good practice to seek professional advice from a communications expert when planning your intervention* (see Box 16.1).

An effective communications strategy should be based on two major assumptions:

- 1 Public awareness can be used to change behaviour by influencing changes in attitudes.
- 2 Influencing profound changes in attitudes will require sustained, long-term effort.

The objective of a communications strategy is to provide a road map for convincing individuals and institutions whose actions – or inaction – are so impeding the conservation and use of CWR that any constraints to such activities should be removed.

A well-developed communications strategy must start by describing the communications objective, the target audience, the audience's current attitude towards the issue, the messages that need to be communicated to change that attitude, and the best ways to reach the target audience. The more you engage and consult with your target audiences about their information and communication needs, the communications tools that they prefer to receive, and the messages and arguments they find convincing (and those they do not), the more likely it is that your communication activities will have a positive impact. Therefore, a communications strategy should be developed at the beginning of a project and refined in the light of feedback during the project's lifetime. To re-emphasize a previous point: *it is strongly recommended to include a communications specialist in the development of the strategy*.

A recently concluded review in Sri Lanka highlighted there was a poor understanding among non-conservation sectors (including both state agencies and the business sector) and provincial, regional and municipal authorities concerning biodiversity and other environmental plans and policies. There was also a low level of awareness about the responsibilities of these sectors to implement such plans and policies. Among the requirements identified by stakeholders in Sri Lanka, was the need to develop a wellplanned communications strategy to map out continuous dialogue and communications with relevant sector agencies, business and policy-makers and to provide capacity building to conservation agencies to enable them to better communicate, promote and 'sell' their image and work plans.

Source: adapted from Communication, Education and Public Awareness: A Toolkit for National Focal Points and NBSAP Coordinators, http://69.90.183.227/cepa/toolkit/2008/doc/CBD-Toolkit-Complete.pdf

Box 16.2 provides a checklist of things to consider when developing a communications strategy.

Identifying and shaping your key messages is critical. While the example presented in Box 16.3 is a good message, it is not the only one. Clearly, it is important to communicate the many benefits of CWR in terms of how they have been used to underpin food production and security, but the rate and consequence of the destruction of CWR and their habitats is an equally important key message. Chapter 14 highlights studies which indicate that by as early as 2055 an estimated 16-22 per cent of wild relatives species of peanut (Arachis), potato (Solanum) and cowpea (Vigna) may become extinct. Many more will lose their range size and the current system of protected areas will only maintain and protect a reduced proportion of CWR species. Also, what we know about future climate change scenarios indicates that many of the characteristics that our agricultural crops will require in future, such as resistance to new pests, increased drought and salinity, will most likely be found among the genetic traits CWR have to offer. The implications and importance of CWR for future food production and well-being are clear. Furthermore, the influential journal, *Science*, recently published a special Food Security issue (12 February 2010) and two papers in particular draw attention to the future importance of CWR for food security, presenting clear opportunities to piggy-back key messages to a wider audience. Given the importance of CWR for keeping agriculture safe and productive, these resources simply must be conserved. The arguments must be made and the case must be built. There is no way around it.

Many of the themes mentioned thus far – biodiversity, climate change, food security and food crises – are all newsworthy and draw considerable attention and interest from the media. The key messages for CWR can clearly be aligned with these themes but will still need to compete with everyone. The publication that recently highlighted the potential impact of climate change on the wild relatives of peanut, potato and cowpea (Jarvis et al, 2008) is probably the best example of a CWR key message being picked up by the media (see Chapter 14). This article

Box 16.2 Developing a communications strategy

There is plenty of information and help available on developing a communications strategy; the majority is freely accessible over the internet. There may be a communications specialist in your organization or at a partner agency. Be sure to make use of such expertise when developing a strategy. As a general rule a communications strategy should determine the following components and in the order presented below:

Objectives

The very first step is to determine the objective of the communications intervention. What do you hope to accomplish? Is the objective to bring about policy change? To raise funds? To inspire a change in priorities among research institutions? The strategy must be driven by the overall objectives of the project or organization.

Target audience

Identify the audience that you must influence in order to meet your objectives. Define all relevant audiences and target groups clearly. Some of your target audience will be broad and will need to be addressed using far-reaching tools (e.g. the internet) whereas some will be highly defined and may be best addressed through face-to-face contact.

Key messages

These should be strategic, targeted and consistent. Different audiences will respond to different messages. No matter which audience you are addressing, the case should be summarized in no more than three key points that can be constantly repeated. Box 16.3 provides an example of how to shape key messages.

Communication tools and activities

Different audiences will warrant different tools. Be aware of which tools the audiences find useful and those which they do not. For example, using the internet to reach a target audience in a country with low bandwidth will not get you very far. The examples in this chapter illustrate the variety of available tools.

Budgets and resources

The budget must be sufficient to support plans and activities or else the strategy should include a well-articulated case for more resources.

Timeline

This will include a phasing of activities and actions that might start with undertaking a needs assessment of target audiences, capacity building and so forth.

Evaluation and refinement of the strategy

This is important for monitoring and evaluating success. Such an evaluation can gather information from both internal and external audiences. Adjustments to the strategy should be made where necessary.

Source: adapted from Media Trust http://www.odi.org.uk/rapid/tools/toolkits/Communication/ Communications_strategy.html

Box 16.3 Selling crop wild relatives

One major selling point to policy- and decision-makers is the contribution that CWR can make as gene donors to increase crop yields and quality. Globally this contribution has been estimated at about US\$115 billion annually worldwide (Pimentel et al, 1997). Genes from wild plants have provided cultivars of food crops with resistance to pests and diseases, improved tolerance to abiotic stresses, tolerance to extreme temperatures, salinity and resistance to drought, as well as enhanced nutritional quality (see Chapter 1). To take a very specific example, a single wild tomato has contributed to a 2.4 per cent increase in solids contents worth an estimated US\$250 million. Furthermore, with climate change, the demand for such genetic traits will rise.

certainly created a sense of urgency regarding the need to collect CWR for *ex situ* conservation, which led the Global Crop Diversity Trust to take this issue seriously, and donors have reacted positively as well. The lesson from the work itself is the importance of generating accurate numbers that capture the scale of the problem and that can be used in the media: 16–22 per cent under threat of extinction from climate change (A. Jarvis, personal communication).

At a more local level, the example of media tours in Uzbekistan highlights how greater attention can be drawn to CWR through the media. In pitching stories to the media, it is important to start with what people know and care about. Very few people know and care about biodiversity. In practice, the best thing to do is to find out what the *media* know and care about. This can be done by reading newspapers and blogs and by asking friendly journalists about their interests. We know that people – including the media – care about climate change, and everyone cares about food. CWR stories that relate to climate change or food issues might be easier to 'sell' than abstract stories or those that are overly technical. Linking your story to something already in the media is always a good strategy, but be sure to have facts and figures; otherwise the story may be vague and will not feel like news. Do not just contact the media periodically; instead, build relationships with them, checking in with the 'friendlies' regularly to bring them up to speed. If these journalists like and trust you, they are far more likely to cover your stories.

Achieving a major goal – such as influencing national CWR policy – is best done in partnership with like-minded individuals and organizations. Partnerships must be cultivated and this can take a significant length of time. All partners need to understand exactly what is expected of them and what they will gain from the partnership. Partnerships require effort, but will give greater weight to your message (if the partners are reputable) and may be able to open doors for you, helping you to get your messages to places that you may not be able to reach on your own, that is, the offices of those key individuals in strategic organizations, agencies and communities.

A communication strategy must also consider that the most effective communications are not merely one-way affairs that consist of bombarding audiences

Biodiversity loss matters and communication is crucial

Communicating the reason why biodiversity loss matters for people is essential if we are to reverse this trend. Like climate change, the threat of large-scale biodiversity loss – and the need for global political commitment and action to halt it – is growing daily. Persuading political leaders and the public of the urgent need to take action is both a complex and formidable challenge. Part of the answer lies in enhancing the media's ability to communicate messages emerging from underlying science, so these accurately reflect both the urgency of the situation and how the lives of ordinary people may be affected. Getting these messages across is not an easy task. So far, in the case of biodiversity, efforts have largely failed and, as a result, CBD targets have not been reached. The scientific community has not been able to effectively communicate its concerns to decision-makers. Often, issues scientists believe are most important do not resonate with the day-to-day concerns of the public, let alone policy-makers. New approaches must address weaknesses apparent in current efforts and be accompanied by more innovative communication strategies.

Source: David Dickson, 5 February 2010, www.scidev.net

with messages and materials. Communications as dialogue and communications for building and maintaining good relations with partners must be part of the strategy. Chapters 4 and 5 provide a context where communication is seen as vital for the development of effective partnerships and successfully engaging with stakeholders. While many communication interventions are clearly aimed at fairly broad audiences (whose influence may be limited), in many instances the most effective communications approach or strategy will consist largely of targeted face-to-face contacts with a few key individuals in strategic organizations, agencies and communities.

Case studies highlighted earlier in this manual clearly illustrate this point. Good examples are the processes of consultation and engagement that were necessary for the establishment of the Sierra de Manantlán Biosphere Reserve in Mexico (Box 1.6) and the development of wild yam species management plans for the National Park of Ankarafantsika, Madagascar (Box 5.5), as are the examples of collaborative work in other protected areas in the UNEP/GEF CWR Project countries highlighted in Chapter 9. The Sierra de Manantlán Biosphere Reserve, established by presidential decree in 1987, was created to protect wild species related to maize. Prior to the establishment of the reserve, local indigenous communities were often in conflict with private logging companies for control of land. This led to the emergence, in the late 1970s, of a strong peasant alliance against the timber companies. Around this time, the discovery of the endemic maize relative *Zea diploperennis*, in its natural habitat in Jalisco, and the interest it attracted from many scientists, was seen by local communities as an opportunity to establish communication with government agencies that had ignored them in

the past. Direct communication between groups and institutions together with effective advocacy with state and national government agencies were instrumental in making the reserve a reality, despite considerable opposition from powerful groups with vested economic interests in the area. Continuing difficulties and conflicts in terms of developing and implementing management strategies in the reserve draws attention to the importance of ongoing communications as dialogue (Nathan Russell, personal communication).¹

The above example of the Sierra de Manantlán Biosphere Reserve, as well as that of the development of wild yam species management plans for the National Park of Ankarafantsika, also highlight the need – depending on the audience – to give due consideration to community-based communications as opposed to more formal tools when developing a communications strategy (see Chapter 5). When trying to sensitize rural communities to the importance of CWR through awareness programmes or general consultation, it is important to consider approaches that are embedded in local culture and appropriate to local contexts and norms. Among various tools that might be considered are biodiversity fairs, folksong competitions, rural poetry journeys and rural roadside drama.

Communication and public awareness tools

There are many communication and public awareness tools to select from. It is beyond the scope of this manual to describe them fully. The reader is therefore referred to some useful sources listed at the end of this chapter, which include techniques, tools, guidelines, case studies and information on networks and sources of experts. The list that follows (see Box 16.4) is extensive but by no means exhaustive; it will serve as a guide to selecting the appropriate tools. The case studies that have been selected should also stimulate thinking about innovative ways of communicating and creating awareness about CWR (see Boxes 16.5 to 16.9).

A distinction should be made between external and internal audiences for communications. Internal audiences comprise organizational or project staff and partners that are involved directly in project planning and implementation, and other current or potential collaborators and relevant donors. These actors are described in Chapter 4. External audiences include the general public and policymakers, and special consideration would have to be given to the communication tools used to target the two groups.

A special mention should be made about the growing importance of weblogs, wikis, listserves and other social networking tools. These are an efficient and effective way of sharing current information on CWR. Options for using such tools to disseminate newsworthy stories on CWR were recently reviewed by Guarino (2008). Such networking tools play an important role in facilitating information sharing within a globally distributed community of CWR conservation specialists, but their role is limited in that they usually are 'preaching to the converted'.

Box 16.4 Communication and public awareness tools

External communications tools

Print/radio

- media press release;
- radio programmes;
- feature articles.

ΤV

- news;
- biodiversity, agriculture, science programmes;
- videos/CDs/DVDs of interesting activities and outcomes.

Advertising and feature stories

- print;
- radio;
- television.

Publishing

- brochures;
- posters;
- bill boards;
- letters;
- leaflets/flyers;
- technical reports;
- websites;
- blogging, listserves, wikis.

Public relations

- biodiversity, science and agriculture shows;
- T-shirts, bags, stickers;
- telephone calls;
- side events;
- conferences;
- networking.

Other tools

- policy papers;
- lobbying;
- role plays and drama;
- educational materials for schools and universities;
- making use of special occasions such as International Day for Biological Diversity (22 May) and World Food Day (16 October);
- special exhibits in botanic gardens;
- school painting, poetry, essay and quiz contests to target young generations.

Box 16.4 continued

Internal communications tools

- phone calls;
- country visits;
- face-to-face meetings with partners/stakeholders;
- email;
- progress reports;
- project newsletters;
- training workshops;
- international and national meetings;
- short-term attachments for information officers and research staff;
- study tours for project staff and other stakeholders;
- intranets;
- travelling seminar to bring together multidisciplinary groups and policy-makers.

Source: Bernadette Masianini, Communication Officer for the Development of Sustainable Agriculture in the Pacific Project (DSAP), http://wwwx.spc.int/dsap/about_dsap.htm (last accessed 14 October 2010)

A good guiding principle is to 'communicate internally before communicating externally'. Make sure the entire organization knows the plan and how they are expected to contribute to it.

Source: adapted from Communication, Education and Public Awareness: A Toolkit for National Focal Points and NBSAP Coordinators (http://www.cbd.int/cepa/toolkit/2008/doc/CBD-Toolkit-Complete.pdf)

The most important thing to know about any communications tool is whether it is meaningful to the target audience. Some people are impressed by things they read in the media – being in the media can add credibility to an initiative. Some like glossy publications or websites; others feel these are a waste of time. Remember that you are using a public awareness tool to reach a target audience. You can find out what your target will respond to by seeing what works or by asking them directly what they need. You will also get an idea of the kinds of tools that work best by asking communication specialists in your organization or locality.

Evaluating success

Earlier in this chapter the importance of evaluation and refining strategies for communication and public awareness was mentioned. This aspect of communication is often neglected. Communication is often seen as a one-way process of reaching or telling others, but communication is also a process whereby the 'communicator' can learn from the needs and interests of the target groups. Such

Box 16.5 The power of art in conveying the conservation message

There are many unconventional ways to communicate a conservation message. Perhaps one of the most effective and appealing ways is art. Japanese artist Mitsuaki Tanabe has chosen sculpture as his preferred means of expression and has shared his concern for conservation by blending art and science. Since the late 1970s, Tanabe has concentrated on creating nature-based sculptures and is passionate about the importance of his work in promoting the conservation of endangered species and the importance of biodiversity. In recent years, the leitmotif of his work has been wild rice and the plight of its conservation. Wild rice, whose natural distribution around the globe has been slowly declining due to habitat loss and degradation, is essential for food security and an important source of breeding traits for cultivated rice varieties. Tanabe has a number of artworks displayed in museums and agricultural research centres around the world.



Figure 16.1 Mitsuaki Tanabe with one of his sculptures

Source: Teresa Borelli, adapted from Geneflow, Bioversity International

an evaluation can only help to increase the impact of your communications strategy. *As this chapter highlights, communication is a long-term undertaking, so we need to continually reflect and ask questions* such as:

- Have we achieved our objectives?
- Did we reach the right audience?

Box 16.6 Development of CWR Information Parks – Sri Lanka

The Sri Lankan Department of Agriculture is taking full advantage of its beautiful setting to bring the story of agriculture - including the role played by wild relatives of crops directly to the public. Inspired by the Department's attractive location in the central hills of Sri Lanka along both banks of the river Mahaweli, Rohan Wijekoon decided to give the public an opportunity to witness first-hand new agricultural technologies and research. This led to the establishment of the Department's first Agriculture Information Park, which now attracts about 30,000 people annually. Visitors to the park learn about important conventional crops in Sri Lanka as well as home gardens, paddy cultivation and traditional farming systems. There is also the national genebank and an agriculture museum. Importantly, the Department of Agriculture is using the park to raise public awareness about the importance of CWR. So far, wild relatives of pepper, bean, okra, banana and rice have been established along the banks of the Mahaweli River. The Department recently established its second Agriculture Information Park at Bataata, in the southern part of Sri Lanka. This park is on the way to one of the most venerable religious places in the country, which many Sri Lankans visit all the year round. The park, which features CWR prominently, was opened by the President of Sri Lanka in January 2008 and is already attracting 8000 to 10,000 visitors per month.

Botanic gardens can also be locations to showcase nationally important wild relatives. For example, in Sri Lanka, Uzbekistan, Armenia and Madagascar, national botanic gardens have dedicated sites for locally important CWR to educate visitors. The Royal Botanic Gardens in Peradeniya, Sri Lanka, receives over a million visitors a year including 250,000 school students.



Figure 16.2 Entrance to the CWR Information Park

Box 16.7 Organizing a media tour to promote and raise awareness of CWR conservation in Uzbekistan

In 2008, Uzbekistan hosted a national media tour involving more than 30 journalists from various national mass-media organizations. The event provided an opportunity for professional ecologists and journalists to come together and discuss the importance of CWR and ways to increase public awareness. The tour then provided an opportunity for the journalists to visit Ugam-Chatkal State National Natural Park, where various specialists working on CWR demonstrated conserved populations of wild relatives of pistachio, apple, almond and walnut to the journalists. Journalists also observed the devastating impact of threats such as water erosion, livestock grazing and tree cutting on CWR. Four television programmes, 10 radio programmes and 18 stories in the national press resulted from the tour.



Figure 16.3 Journalists on the CWR media tour

Source: Sativaldi Djataev and Feruza Mustafa

- Did they understand what the message was did they do what had to be done?
- Did we reach the right people within the organization?
- Did we use the right tools?
- Were decisions taken as a result?
- Did this result in concrete actions?
- Did we meet our budget? If not, why not?

Box 16.8 Creating awareness of CWR inside protected areas

Protected areas are one of the most important locations for *in situ* conservation of CWR. They also receive large numbers of visitors annually. Most often, these visitors have little or no understanding of the kinds of wild relatives in the protected area, or their importance. This presents a useful opportunity for public awareness activities. In Sri Lanka, public awareness work was undertaken in the Kanneliya Forest Reserve with the aim to help visitors learn about the biodiversity of wild cinnamon in the park and efforts to enhance *in situ* conservation. Signboards were placed throughout the park and posters hung in visitors' dormitories, which explained the role and importance of CWR. There are also plans to create a display focusing on CWR at the entrance to the Forest Reserve.



Figure 16.4 Signboards raise awareness on the importance of CWR in the Kanneliya Forest Reserve, Sri Lanka

Source: text and photo, Anura Wijesekara

In this regard it is worth considering holding focus group discussions with your target audience to clarify:

- What do they read/see/hear?
- What works/does not work?
- What do they want to see more of?
- What information do they need that you do not currently have?
- How often do they want us to communicate with them?

Box 16.9 Rural poetry journey and rural drama in Nepal and Sri Lanka to raise public awareness of conservation of wild rice

The Nepal On-farm Project mobilized local cultural groups and rural poets to sensitize the community awareness programme with multiple approaches embedded in local culture and taste. Among various tools used, biodiversity fairs, folksong (teej geet) competitions, rural poetry journeys and rural roadside drama were found most popular and effective in communicating messages to a wide range of rural audiences. Rural drama was also effectively employed in Sri Lanka as part of the UNEP/GEF CWR Project.

Rural poetry journeys are a kind of participatory travelling seminar; in this project selected teams of national and local poets visited diversity-rich areas, including wild rice (Oryza rufipogon L.) habitats in the Begnas Rupa Lake watershed in Nepal. The teams spent time with farmers, learning of the value of wild rice and reciting poems and songs in the evening in the village. The impact of the poetic pilgrimages was encouraging and proved to be effective in generating awareness among a large number of farming communities. The poets recited their 'odes to wild biodiversity' to the community before moving on to the next village. At the end of journey, the poems were compiled and published as a book. Selected poems were regularly cited by rural radio to sensitize the community about environmental issues.



Figures 16.5 and 16.6 Teej song competition

Source: LI_BIRD/NARC 2000 Teejgeet Pratiyogita – Contributed by Bhuwon Sthapit



Figure 16.7 Using rural drama to raise awareness

Source: Mr R. Vijekoon, Sri Lanka

While it is easy to keep track of the number of public awareness materials produced and distributed, or the number of visitors to a website and files downloaded, it is more important, but more challenging, to measure the actual impact of these materials on your target group (see Box 16.10). Is your target audience more aware of CWR than before your intervention? Has the communications intervention changed the way they behave? What is the long-term impact of these changed behaviours? Has your intervention contributed to a better enabling environment for CWR conservation? Is there evidence that governments or other agencies are allocating more funds and resources to CWR in situ conservation as a result? The further you travel along these evaluation steps the more difficult and costly it is to measure impact, and the harder it is to clearly demonstrate a causal link to the initial intervention. Having said this, there are ample evaluation tools available for use, such as questionnaires, focus group discussions, case studies and participatory evaluation approaches, that can be found in the further information sources listed at the end of the chapter as well as on the internet.

Measuring impact is relatively easy if your audience is small and your objectives are measurable. If your objective is to influence policy and your target audience is key parliamentarians, you can be sure you have had some impact if policies do change as a result of consistently targeting these individuals and sharing the information they need. With a larger audience such as the general public, it is more difficult to judge the impact, even with an unlimited budget. Nonetheless, baseline attitude surveys are always a good way to start.

Before and after surveys to assess the impact of a CWR public awareness campaign as part of the UNEP/GEF CWR Project in Sri Lanka highlighted that greatest impact was among protected area managers and extension workers, but among policy-makers the impact was low (Figure 16.8).

Sources of further information

Bioversity International's *Geneflow* is an annual magazine that contributes to promoting awareness of the importance of the earth's agricultural biodiversity and the role it plays in improving people's lives and livelihoods. Website:

http://www.bioversityinternational.org/publications/publications/geneflow/2008.html

- The Communication Initiative Network is an excellent general website on communication, with extensive resources, tools, examples, funding sources, etc. In many cases it is searchable by country/region, issue and communication tool. It also has a site maintained in Spanish. Website: www.comminit.com
- Hamu, D., Auchincloss, E. and Goldstein, W. (2004) Communicating Protected Areas, IUCN Commission on Education and Communication. This has useful information on strategic communications in the context of protected areas. Much of the information is highly relevant to professionals involved in CWR conservation. The book is illustrated with a number of case studies describing communication tools and approaches that could be easily adapted to build support for CWR *in situ* conservation.

Box 16.10 Measuring the success of public awareness

How can we measure the impact of public awareness activities or campaigns to promote understanding and conservation of CWR? All countries participating in the UNEP/GEF CWR Project undertook significant public awareness activities using a number of the tools listed in Box 16.4 and described in this chapter. Hardly surprising, before and after assessments demonstrate that such activities and campaigns do seem to contribute to better awareness and understanding of CWR among a wide range of target groups the general public, policy-makers, scientists, protected area managers, NGO staff and so forth. In Armenia, for example, in 2005, before such activities commenced, 23 per cent of people in urban areas, including scientists, were able to name some CWR species and 36 per cent had some general understanding or knowledge of CWR (compared to 10 per cent and 17 per cent for rural areas). By 2009, following countrywide public awareness activities, these figures had increased to 37 per cent and 43 per cent, respectively (compared to 30 per cent and 35 per cent for rural areas). But the goal is not simply awareness for the sake of awareness alone. To what degree do such efforts translate into more support for actual conservation actions? Without long-term sustained and targeted interventions and the refinement of communication strategies over time, it is hard to know. While there are some indications that countries are committed to sustaining activities and implementing management plans and strategies, it is too early to say how likely this is to become a reality. We already have too many examples of how such initiatives fall by the wayside after a project stops. A real indication of success would be the allocation of dedicated budgets for in situ CWR conservation in national programmes, as well as greater financial commitments from donors.



Source: Armen Danielyan, National Project Coordinator, UNEP/GEF CWR Project, Armenia

Figure 16.8 General awareness of CWR among stakeholder groups in Sri Lanka following a project-led public awareness campaign

Source: Mr Kamal Karunagoda, Sri Lanka

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Hesselink et al (2007) Communication, Education and Public Awareness: A Toolkit for NSBAP Coordinators, CBD/IUCN. Website: www.cepatoolkit.org

Hovland, I. (2005) Successful Communication: A Toolkit for Researchers and Civil Society Organisations, Overseas Development Institute, London. Website: http://www.odi.org.uk/resources/download/155.pdf

- The IUCN Commission on Education and Communication is a network that drives change for sustainability. More than 600 members volunteer their professional expertise in learning, knowledge management and strategic communication to achieve IUCN goals. It provides access to experts, thematic issues, networks and downloadable resources. Website: http://www.iucn.org/about/union/commissions/cec/
- Lockwood, M., Worboys, G.L. and Kothari, A. (2006) *Managing Protected Areas: A Global Guide*, Earthscan. Chapter 10: 'Obtaining, managing and communicating information' has useful information on the principles of good communication and methods and approaches for communicating with local communities. The information is written in a protected area management context and therefore highly relevant to CWR conservation.
- The Media Trust has a wealth of communications and publicity-related information on how to improve outreach including training resources and online guides for public relations, communications and dealing with the media. Website: www.mediatrust.org
- *Roots, Cuttings* and *BGjournal* are magazines published by Botanic Gardens Conservation International, which contain stories and case studies about successful public awareness and education activities as well as regular listings of resources. Website: http://www.bgci.org/resources/publications/

Note

1. http://river.unu.edu/e-archive/14.pdf.

References

- Guarino, L. (2008) 'Some thoughts on sources of news about crop wild relatives,' in N. Maxted, B.V. Ford-Lloyd, S.P. Kell, J.M. Iriondo, M.E. Dulloo and J. Turok(eds) *CropWild Relatives Conservation and Use*, pp521–531, CAB International, Wallingford, UK
- Jarvis, A., Lane, A. and Hijmans, R. (2008) 'The effect of climate change on crop wild relatives', *Agriculture, Ecosystems and Environment*, vol 126, pp13–23
- Pimentel, D., Wilson, C., McCullum, C. Huang, R., Dwen, P., Flack, J., Tran, Q., Saltmna, T. and Cliff, B. (1997) 'Economic and environmental benefits of biodiversity', *BioScience*, vol 47, pp747–757