

CHAPTER

7

Communications¹

Introduction

On the assumption that previous chapters have made the NSDS philosophy and principles clear, this chapter focuses on practical ideas on the methods and channels for communication and information, as well as outlining some of the shifts required to unblock some of the all too frequent barriers to communications for, and about, sustainable development.

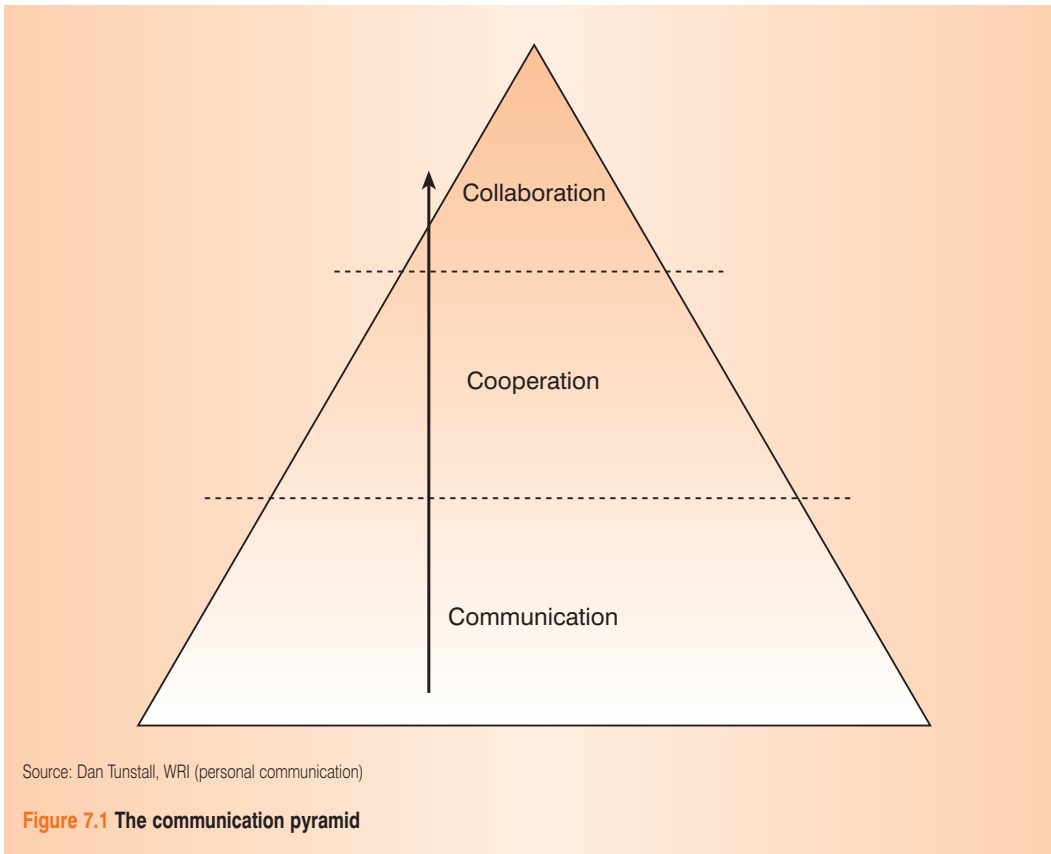
A strategy for sustainable development involves a long-term process of change. Capacity to manage this process is required at the individual, institutional and systemic levels. To be effective, a strategy needs to be participatory and interactive. Representatives of government, civil society and the private sector should be enabled to get to know each other, discuss challenges and perspectives, identify problems and needs, agree new objectives and roles, make transitions towards these ends, be kept up-to-date on progress and problems, and correct course when needed. These tasks depend critically on awareness, trust, coordination and mechanisms for dialogue. Conversely, misunderstanding and unrealistic expectations make a coordinated approach to sustainable development very difficult. In a world where all initiatives have to compete for attention, the strategy needs to be presented as an attractive initiative with clear opportunities and clear limits, to excite relevant stakeholder input and to ensure public support for its implementation.

Effective communication is the principal vehicle for the above tasks. It is no wonder that it has been called the 'lifeblood' of a strategy (Carew-Reid et al 1994). Indeed, without clear two-way communication, engaging all key stakeholders, a strategy will not succeed because cooperation and collaboration – which depend on it – are compromised (Figure 7.1).

The information, education and communications (IEC) strategy and action plan will influence the purpose and objectives of the NSDS, who is involved, what gets discussed, and what actions are taken and their outcomes. Its philosophy, rationale, methods, style and reach are, therefore, critical considerations. The NSDS principles and elements (Boxes 3.1 and 3.2) should be used to help develop the IEC strategy and action plan – they apply as much to communications as to the NSDS itself.

Effective communication is the 'lifeblood' of a sustainable development strategy

¹ This chapter has benefited from review comments and additional material provided by Dafina Gercheva, Bulgaria; Saneeya Hussain, Panos, Nepal; Penny Stock, UNDP Capacity 21; and Lilian Chatterjee, IIED.



Shifting values, attitudes and styles

Experience from previous strategic planning frameworks reveals difficulties in:

- *Information management*: Accessing and generating information and knowledge to support the preparation and implementation of strategies.
- *Information use*: using information effectively once available.
- *Language*: Sharing information with participating stakeholders, and with the general public, on sustainable development in everyday and easily comprehensible language.
- *Targeting*: Providing information that is tailor-made and relevant to the needs and interests of different target groups.
- *Access*: Providing equal access to the information for all parties involved in the strategic planning.

Currently, information is provided without sufficient explanation or elucidation, and this is insufficient for the demands of modern strategic governance.

To overcome these difficulties there is a need for a coherent shift in values, attitudes and styles. The following requirements should be discussed early on in developing the IEC strategy:

- An 'easily understood' *conceptual basis or model* for sustainable development as a social construct, involving institutional change.
- A *commitment to disclosure of, access to, and provision of information* as an essential element of accountability and transparency. At the international level, Principle 10 of the Rio Declaration stressed the need for 'citizen's participation in environmental issues and for access to information on the environment held by public authorities'.² In some regions and countries, this has been

Strategy stakeholders need to agree on a commitment to good information access and provision

Box 7.1 The Aarhus Convention

The Aarhus Convention binds governments to make environmental information publicly available within a specific timeframe through national legislation.

'In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.' (Article 1)

Convention on access to information, public participation in decision-making and access to justice in environmental matters. Objective. Aarhus, Denmark, 25 June 1998.

Source: <http://www.unece.org/env/pp/treatytext.htm>

followed up by conventions and legislation outlining civil rights in environmental and social issues; for example, the Aarhus Convention of the UN Commission for Europe has three 'pillars': access to information, public participation in decision-making and access to justice (see Box 7.1).

The Access Initiative is a global coalition of public interest groups that seeks to promote public access to information, participation and justice in environmental decision-making (Box 7.2).

- Acknowledgement that *information and power are inextricably linked* and that a realistic IEC strategy and action plan needs to be shaped by local as well as national realities. This will help to strengthen the NSDS process by promoting informed decision-making (Powell 1999). There is a need to analyse access to information by key stakeholders, taking account of age, gender, socio-economic status, culture or geographic location.
- A shift from just didactic ways ('us teaching them') to *more inclusive methods of communication, learning and dialogue* (eg round table discussions, seminars, negotiations, establishing strategic partnerships, etc). Strategy processes open up opportunities for innovative and two-way communication which enable the stakeholder groups to talk and listen actively to, and be informed by, each other (Howard and Scott-Villiers 2000). It is important to foster a *culture of dialogue* (across levels, sectors, borders), supported by networks (human and electronic) of practitioners, stakeholders and other change agents. These networks are essential to sustain the growth of (and linkages between) institutions and individuals, as well as to generate learning dynamics. The establishment of feedback mechanisms for learning is essential.
- *Empowering individuals and communities to take part in learning, knowledge creation, sharing and use* through and for the strategy. It is useful to encourage stakeholders to prepare and bring their own information into the process rather than solicit new studies by external consultants.
- Recognition that communication can be an ill-defined discipline, misunderstood, under-valued and often ignored for its contribution (actual or potential) to development (Rockefeller Foundation 1999). This requires a shift from communicating often glossy, dull and uninspiring project and programme data to *understanding the information and communication needs* of stakeholders, enabling their *learning* through the strategy development process, and encouraging their *involvement in its implementation*.
- *Capitalizing on traditional, indigenous knowledge and culture*. Indigenous knowledge systems, as growing bodies of locally relevant experience and means for resilience, can make positive contributions. Institutional processes need to be able to value and encourage them.

Box 7.2 The Access Initiative

Launched in November 2000, the Access Initiative is led by the World Resources Institute (USA), Environmental and Management Law Association (Hungary), Corporación Participa (Chile) and the Thailand Environment Institute. To implement public access to information, participation and justice in environmental decision-making requires national policies, legislation, institutions and practices for *public access to*:

- information in emergencies and monitoring information about the quality of the environment and natural resources;
- information about the environmental performance of industrial facilities and/or pollution release and transfer registries (PRTRs);
- opportunity for review and comment on decisions on sectoral policies, programmes, plans with potential environmental impacts;
- opportunity for review and comment on environmental impact assessment (EIAs) and decisions on site-specific activities with environmental impacts;
- redress and remedy for infringement of rights to access to information and participation.

By proposing and assessing *benchmarks of performance in the above areas*, the Access Initiative aims to promote their establishment as good practices and common standards for all countries.

The Access Initiative will build on the momentum created by Europe's Aarhus Convention (see Box 7.1), and will provide support to civil society organizations in other regions seeking to promote similar norms of environmental governance. It is pursuing a two-track approach involving parallel strategies:

- A short-term strategy targeting the World Summit on Sustainable Development in August 2002 as an opportunity to assess progress towards implementation of Principle 10 in the Rio Declaration.
- A long-term strategy designed to develop an inclusive, decentralized and sustainable institutional framework to accelerate the implementation of Principle 10 in the years following the Summit.

In implementing its short-term strategy, the Access Initiative works at three levels:

At the national level in nine pilot countries (Chile, Hungary, India, Indonesia, Mexico, South Africa, Thailand, Uganda, USA), the Initiative will support local groups to conduct assessments and monitor the extent to which structures and practice of government agencies are consistent with commitments to access to information, participation and justice in environmental decision-making.

At the regional level, the Initiative will promote the adoption of best practices and implementation of regional instruments and/or commitments to access to information, participation and justice in environmental decision-making. Examples of such commitments include the Aarhus Convention and the Organization of American States' Inter-American Strategy to Promote Participation in Sustainable Development.

At the global level, the Initiative will support a coalition of organizations to collaborate on the development of indicators of implementation, and provide a platform for institutionalization of the Initiative over the long term. To achieve this long-term outcome the Initiative will:

- raise awareness among government, civil society and private business actors regarding existing commitments to principles of openness in environmental decision-making, and forge consensus on what these principles mean in practice;
- strengthen the capacity of public interest groups both to assert access to information, participation and justice in environmental decision-making, and to identify and monitor gaps between stated commitments and actual performance on the part of public authorities.

Source: The Access Initiative Summary, www.accessinitiative.org

- Supporting *advocacy and awareness-building* on sustainable development issues and options among parliamentarians, journalists and decision-makers at all levels.
- Incorporating sustainable development dimensions into *formal educational curricula* at all levels.
- Developing *partnerships with media actors* at the local, national and international levels. These are important as part of an overall effort to inform public opinion and key decision-makers about the strategy process and sustain momentum.

Box 7.3 Principles of effective communication

The Communication for Social Change initiative of the Rockefeller Foundation defines such communication as a process of public and private dialogue through which people define who they are, what they want and how they can get it. Social change is defined as change in people's lives as they themselves define such change. This initiative seeks particularly to improve the lives of the politically and economically marginalized, and is informed by principles of tolerance, self-determination, equity, social justice and active participation for all. It attempts to rebalance strategic approaches to communication and change by emphasizing what can, in practice, be regarded as principles for effective communication. These principles take the emphasis:

- away from people as the objects for change ... and on to people as agents of their own change;
- away from designing, testing and delivering messages ... and on to supporting dialogue and debate on the key issues of concern;
- away from the conveying of information from technical experts ... and on to sensitively placing that information into the dialogue and debate;
- away from a focus on individual behaviours ... and on to social norms, policies, culture and a supporting environment;
- away from persuading people to do something ... and on to negotiating the best way forward in a partnership process;
- away from technical experts in 'outside' agencies dominating and guiding the process ... and on to the people most affected by the issues of concern playing a central role.

Source: Rockefeller Foundation (1999)

There are special challenges to communicate what 'sustainable development' is – but plenty of 'tricks' on how to do it

- A shared understanding that communication to influence behavioural change is a *slow process* (it needs time to gestate). It requires a judicious balance between *longer-term commitment to social interaction and learning*, and *communications activities with more immediate impacts*.
- *Clear understanding of the principles for effective communication* in strategies for sustainable development. These are laid out in Box 7.3. There are some particular challenges in communicating sustainable development issues, set out in Box 7.4. Some of the means to overcome these difficulties and effectively put across sustainable development messages are suggested in Box 7.5.

Establishing a communications and information strategy and system

Government alone cannot develop a high quality NSDS. It needs analytical and other inputs from civil society stakeholders such as NGOs and policy research groups, to ensure that the strategy process has access to and takes account of a broad body of information and views. Access to information and communication is a precondition for sustainable development, and can help stakeholders to break out of their isolation, exchange ideas and learn from the experience of the others. Fortunately, this is a task that is being made much easier by technology. Telephones, fax machines, computers, television and radio have transformed the ability of ordinary people to become informed, and thus to liberate their creative potential. Each technology has contributed to breaking down barriers to information exchange.

Therefore, as indicated in Box 4.1, a key step in the strategy process is for the secretariat to establish a *communication and information strategy and system* to ensure regular, two-way flows of information concerning both the strategy process itself and sustainable development, and effective dialogue between stakeholders and between fora (see Box 7.6). This, in turn, will help build the necessary national consensus, create transparency and facilitate public participation in the elaboration and implementation of the NSDS. Communication should be an ongoing task through successive cycles of the strategy process. Effective communication will promote wider participation – horizontally, by linking different sectors, and vertically, by bringing local to global, and global to local. This would require:

Box 7.4 Sustainable development – a communications challenge

Whilst the concept of sustainable development recognizes the interdependence of environmental, social and economic dimensions, it does itself not provide a clear vision of where we go and how we get there. Nor does it address the issue that these dimensions are connected, but with unequal power and interests, and therefore, sustainable development is very much a long-term political project that requires deep changes in governance. Sustainable development is justified in the long-term, but most of our political and economic systems function on a short-term basis. Sustainable development does not itself provide mechanisms to bargain about trade-offs between long- and short-term considerations, and between the three pillar dimensions. The point is that sustainable development is a paradigm that leaves it to people and countries to interpret and take forward, without directly addressing the underlying structures that make it so difficult. It is, therefore, difficult to 'sell'. An NSDS is an approach to overcome some of these problems, but must be seen in the context of real structures. (Stephan Paulus, GTZ, personal communication)

The term 'sustainable development' is often seen as a communications failure. Respected journalists and communicators have recognized this:

- 'Any attempt by a journalist to do a story on sustainable development per se is almost doomed to failure.' (former BBC environment editor)
- 'It's grandiose and vague – as good as bad television for sending you to sleep.' (Jonathan Dimbleby, broadcaster)

Many NGOs avoid using the phrase, believing it has little resonance with the public:

- 'Sustainable development means absolutely nothing to most people and never will.' (WWF-UK campaigns director)
- 'People see it as loose, undefined words.' (Greenpeace)

Indeed, *there's a strong consensus amongst those engaging with the public that the term sustainable development is a turn-off* (report for the UK Commission for Sustainable Development). The general public certainly does not understand the term, as a 2001 survey by Forum for the Future found.

However, the concept is not difficult to grasp, and it should not be presented as 'too difficult' for the ordinary person. Once prompted by Forum for the Future, most people interviewed could talk about sustainable development as it affects their life, work, investment, shopping and leisure. They could then express sustainable development as being of central importance, especially in their neighbourhood. Of course, it is also inherent in a wide range of important global, national and business initiatives as well as neighbourhood concerns. Indeed, it is being used as the strategic organizing concept for key government, education and business decisions.

Perhaps that is part of the problem. Those who have been using the phrase 'sustainable development' most commonly are government agencies and, increasingly, corporations. They use the term promiscuously but vaguely – implying that they are merely justifying current policies, especially if those policies have not yet changed. This can increase the 'turn-off' factor.

Even though journalists and environmentalists have pointed out the difficulties of the *term* sustainable development, their leading practitioners are convinced of the concept's value:

- 'The words are boring. The subject isn't.' (Geoffrey Lean, journalist)
- 'Sustainable development is the only intellectually coherent, sufficiently inclusive, potentially mind-changing concept that gets even half-way close to capturing the true nature and urgency of the challenge that now confronts the world. There really is no alternative.' (Jonathan Porritt, environmentalist)

Box 7.5 How can sustainable development be communicated successfully?

- By recognizing that it is *specific issues that interest people*, rather than the whole of the SD agenda: 'If you replaced all the various eco-labels with one saying "certified sustainable" it might on the surface be simpler and more rigorous, but a lot of enthusiasm would collapse.' (Corporate social responsibility consultant)
- In other words, breaking SD down into *manageable pieces that make sense to people in their context*. Not forbidding the words 'sustainable development' but adding the message that 'this idea/initiative contributes to sustainable development'.
- By using opportunities to *demonstrate links between the issues that matter to people* – for example trade terms and environment, fuel use and flooding through climate change.
- *By presenting the positive side, not just the negative*. Too often, problems are presented, implying that SD is about what you *cannot* do. In contrast, SD communications should emphasize opportunities, ideas and innovations that excite people about the future, and show what roles people can play in it.
- This will often mean *focusing on the doable and immediate* – recycling and local environmental clean-ups – and adding messages on the broader, longer-term context for these activities.
- It will also mean *illustrating options for the future that interest people*: for example, low-energy housing and transport, community action to remove homelessness, farmers' markets that strengthen rural economies and provide healthier food.
- *By using good communications practice*: asking people what concerns them, and what they can do, and not just telling them what to do; spinning stories about what has worked, and not just presenting abstract 'recommendations'; using straightforward language rather than jargon; knowing the audiences and their concerns and not just the subject and its complexities. This approach works for the 'specialists', too.
- *By opening up workshops and conferences to other stakeholders* who will be comfortable with the above, and not feel obliged to talk about SD among 'insiders' only. SD does not need 'dumbing down' to do this: it needs 'opening up'.

Principal source: *Green Futures* No 30 (2001) Forum for the Future, London

- putting in place, within the secretariat, appropriate information, education and communication (IEC) staff with a broad range of skills (see Box 4.6) and a clear mandate;
- identifying, through an initial scoping exercise, the precise information and communications needs of the secretariat itself, and of the key participants;
- preparation of a promotional strategy about the NSDS;
- commissioning a sectoral paper on the current state of information, education and communication to provide baseline information for the preparation of an IEC strategy and action plan;
- after a multi-stakeholder consultation process, preparing a longer-term IEC strategy and action plan that addresses the communications needs of each stage in the NSDS process.

Prior to the preparation of an IEC strategy, the team might wish to establish an IEC Roundtable (see Boxes 3.20 and 7.11 for examples from Pakistan's national, provincial and district conservation strategies) with

Box 7.6 Communication strategy for the Pakistan National Conservation Strategy

To ensure that a planned, comprehensive, coordinated approach using the most appropriate medium is used to generate awareness of the NCS, it was thought necessary to draw up a strategy for communications. It was hoped that this strategy would help avoid the traditional ad hoc focus on reactive publicized solutions to environmental problems, and instead create a systematic support for effecting behavioural change. Adil Najam of the NCS secretariat makes recommendations for this behavioural change in his prescriptive study, *Communicating Conservation*. According to him, behavioural change does not just support the NCS environmental awareness campaigns—it is the NCS. In order for the communication process to be truly effective, it must empower individuals and communities by educating them on the issues of sustainable development.

A communication strategy is therefore an essential prerequisite to intelligent planning and implementation. It does not preclude mistakes; it simply improves the chances of success.

Source: Final Report. Mid-Term Review of National Conservation Strategy. Mass Awareness Initiatives. HBP Ref.: D0B01NCS. February 16, 2000. IUCN Pakistan Islamabad

multi-stakeholder representation from the broadcast and print media, the performing arts, IT, education and NGO sectors. This would, in particular, ensure inputs into and ownership of the communications strategy upon its completion and implementation.

An information, education and communications strategy and action plan

An *IEC strategy* acts as the principal policy and intellectual framework for planning education and communications activities. It should envisage the establishment of a general and enduring mechanism for consulting civil society concerning all important decisions and initiatives towards sustainable development, in order to allow wider public participation, to build consensus and to ensure ownership and support. It should include the steps that are needed to promote and develop continuing education about sustainable development (see Box 7.7).

At an operational level, the IEC strategy requires translation into an *action plan* that identifies key

Box 7.7 Educating for sustainable development

The overall success of any sustainable development strategy will depend on the involvement of the people and their willingness to take responsibility. They need relevant *information* in forms that they can understand and use, as well as *skills* and *motivation*, which will facilitate change.

Over time, it has been demonstrated that education is the most efficient and cost-effective means to change people's thinking towards a particular problem, which then produces the desired attitudinal change. As Albert Einstein once said, 'We cannot solve the problems we have created with the same thinking that created them'.

Awareness raising and education are important tools in moving towards sustainable development, and should be used as complements to legal, regulatory and economic tools. Knowledge leads to greater understanding which, in turn, helps to foster sustainable development practices. However, understanding is only one element that can generate changes in behaviour. Other ingredients which can stimulate change include motivation, access to skills and opportunities, relevance and self-interest, and recognizable and tangible benefits. The advantage of an NSDS process is that it can combine these factors.

Education for sustainable development needs to meet three important goals (adapted from the Tbilisi Declaration, UNESCO 1977):

- To foster awareness and *understanding of the interdependence* of the economic, social and ecological dimensions of development, in both urban and rural areas, and the need to deal with these holistically as well as with political, technological, legislative, cultural and aesthetic concerns.
- To provide every person with *opportunities to acquire* the knowledge, values, attitudes, commitment and skills needed to contribute to sustainable development.
- To create *new patterns of behaviour* among individuals, groups and society as a whole towards the environment, society and the economy.

To meet these three goals, education initiatives should:

- evolve within the existing education system;
- focus on sustainable development at all levels in the formal education system;
- adopt interdisciplinary methods;
- take a global perspective while also having regard to regional differences;
- promote the value of local, national and international cooperation in making progress towards sustainable development;
- focus on both current and future situations;
- centre on practical problems that relate directly to the students' immediate environment;
- aim to instil an ethic of conservation;
- include comprehensive non-formal education programmes to provide information about sustainable development to a wider segment of the population than is possible through formal means;
- be a continuous, life-long process, both in school and beyond;
- emphasize active stakeholder participation in preventing and solving development problems.

The goals are especially important in many developing countries where the literacy rate is low, formal education infrastructure needs to be improved, and NGOs have started playing an important role through non-formal communication and education channels.

The communications plan should think through: what is the message? Who needs to hear it? How to get the message across? And how to follow up?

participants/audiences, the kinds of behavioural change required, appropriate messages and means of communicating them, responsibilities and resources, and the most difficult aspect of them all – indicators for monitoring behavioural change. It will need to include activities with short-, medium- and long-term timeframes. Activities to promote cultural, attitudinal and behavioural change will most likely be of a long-term nature (3+ years) and will require sufficient resources to see them through. The action plan should be regularly revised throughout the strategy process.

Skills in developing and implementing an IEC strategy and plan with government, civil society and private sector players will be vital; as will training in such skills where they are in short supply. The IEC team will need to understand the conceptual basis, genesis and dynamics of the NSDS, as well as the technical issues; and thus will need to be involved (as a core element) in the NSDS process from the start – not be seen as a supplementary activity to be added down the line (as has so often been the case in the past). It is very important that they understand how the various stakeholders communicate, learn and change behaviour. A priority task for the team will be to set up a network of principal communications agents and media contacts for different localities, topics and groups.

Box 7.8 provides a set of questions to help guide the design of the IEC strategy.

Box 7.8 Key questions for developing an information, education and communications plan

The National Institute of Design in India has defined a sequence of eight questions, which it follows in the field when developing communications strategies for national or local development programmes. This approach has been tested and refined through more than a decade of field experience:

- **Target audience:** whose behaviour must communication attempt to change?
- **Target response:** what is the behaviour change that is needed?
- **Research involved:** what do we need to know about existing knowledge, attitudes and practices before planning our messages?
- **Target message:** what messages can be exchanged between planners/activists and target audiences to help achieve the desired response?
- **Media:** what media are best suited to the exchange of the target message?
- **Media resource institutions and individuals:** what skills and talent can be drawn on to help develop and implement media decisions?
- **Budget:** what will be the cost of communication plans to reach each target audience?
- **Evaluation criteria:** what goals and indicators will be used to monitor the intended behaviour change?

Evaluation should lead to reviewing each step in a sequence, and reactivating the sequence in the next phase of the communications strategy.

Source: Carew-Reid et al (1994)

Coordination of information

The various agencies responsible for the NSDS will need to ensure that partners and stakeholders are informed about new developments and are encouraged to respond. The mass media should be encouraged in its role as critic and monitor. To service these different needs, an IEC ‘clearing house’ may be needed to ensure that information is disseminated effectively to the appropriate audiences (within and outside government) and fed back into the strategy. This may be best managed by the IEC team.

The coordination of information can be seen from two perspectives: *internal* (within government or the core strategy stakeholders) and *external* (between the government/core strategy stakeholders and other stakeholders):

INTERNAL COORDINATION – FOCUS ON CREATING A SHARED INFORMATION BASE

There is a need for effective internal cooperation and coordination between individuals and institutions within government – breaking down traditional barriers and attitudes which defend areas of influence and control ('turf') – in support of strategy development and implementation.

The development of a common information base on sustainable development – to make relevant information readily accessible and to enable information to be manipulated to useful ends – is therefore a priority task at the beginning of a strategy process and needs to be maintained throughout the process. Such an information base does not need to be in one place, but all information needs to be accessible to everyone. See Chapter 10 on monitoring, and Chapter 5 (pages 133–162) on sustainability assessment. Electronic approaches can enable an information base to be put together by many stakeholders efficiently (page 246).

A common information database can unite strategy stakeholders – as well as bringing all helpful information together

EXTERNAL COORDINATION – USING A WIDE RANGE OF METHODS

There is also a need for effective external communication between government and other stakeholders (donors, the private sector, civil society), as well as with other interested parties (eg donors), and for stronger partnerships with key media actors in support of the strategy process.

Communicating with the general public is very important, since strategies for sustainable development are of concern to everybody. Strategies must be open and transparent to the wider public concerning their objectives, structure and processes. So information should be released throughout all stages of the process and not just published as a final strategy document. The general public also needs to be encouraged to play roles in pushing for, and monitoring, standards and indicators of sustainability. All participants should be free to share information about the strategy with the public and present it from their perspective. To avoid public confusion, however, communication on the strategy process as a whole should be coordinated by the secretariat. The secretariat should clarify how and when it plans public inputs and reactions will be sought throughout the process. The challenge of making issues understandable to the general public will need to be addressed.

Mass media channels are generally relied on for communicating with the public in layman's language, though so-called 'alternative' media may also be appropriate at times with particular groups (Table 7.1).

Communications with the public may be divided into the following:

- *Public relations activities* (short-term impact): these are usually conducted through the mass media and advertising, and are principally a one-way means of communications.
- *Market research*: this elicits one-way communications in the opposite direction, that is, from the public. Chapter 6 (page 225) gives details. Work on NSDSs has included:
 - *Opinion polls*. A regular and large-scale poll of the general public can elaborate an independent view on the strength of public feeling and awareness on different issues. This can be a very powerful tool in the strategy policy formulation and associated debates.
 - *Phone-ins*. In developing New Zealand's Environment 2010 strategy (1995), free phone-in facilities were provided to encourage public participation. All comments made were added to the written submissions and entered into a database to prepare a profile of issues.
- *Public awareness activities* (medium-term impact): these work by consulting groups in the strategy process, through traditional and mass media and government/NGO participation structures; involving them in the debate on sustainable development; and keeping them informed about all aspects of the outcomes (Box 7.9 provides an example from Burkina Faso).
- *Public participation* (longer-term impact): this takes much longer and depends on incentives, formal and informal education and training, and results in behavioural change. Mass media activities are much less significant here. Active participation and experience are key, particularly in setting and monitoring indicators of sustainability. Participation is discussed in detail in Chapter 6.

Non-technical, 'everyday' language can help the 'experts' as much as the general public

Table 7.1 Examples of mass and alternative media forms**Mass media:**

Newspapers	Weekly magazines (programmes and news spots)
Radio	Commercial journals
Newspaper and magazine advertisements	Cinema
Television	Web-based publishing

Alternative media:

Printed/written media	Local publications
Annual reports	Newsletters
Banners	Pamphlets and brochures
Children's books	Pins and badges
Comic books	Poems
Information kits	Specialized reviews
Labels and stickers	Teaching materials
Letters	T-shirts

Audio-visual media:

Advertising panels	Posters
Documentary films	Public announcements
Exhibitions	Songs
Photographic exhibitions	Video and slide presentations

Interactive media:

Competitions – art, debating, farming	Parades
Presentations	Participation in existing events
Press conferences	Prizes and recognition awards
Public debates	Public meetings
Site visits	Puppet shows
Symposia in universities	Religious programmes
Telephone	Round tables
Demonstrations	Special days (World Environment Day ...)
Face-to-face (neighbour-to-neighbour, child-to-child, etc)	Street/community theatre (beaches, public places, medina or souk)
Expert conferences	Visits
Internet	Youth clubs
Religious fora/activities	

Source: Adapted from Mehrs (1998)

Choosing the medium, and developing complementary information products

In order to improve awareness, change attitudes and encourage action on sustainable development, various information products will be required, notably: documents and audio-visual (page 238), events (page 240), networks (page 242), databases (page 245), electronic media (page 246) and mass media (page 249).

Box 7.9 Sustainable development and desertification: a public awareness campaign in Burkina Faso

In Burkina Faso in the late 1990s, nearly 47,000 people took part in a nationwide campaign to spread the word about sustainable development and its key role in combating desertification. While communicating information and raising awareness at the village level, teachers and trainers also listened to the people, finding ways to convey the people's priorities to planners and policy-makers in the capital. Many citizens were involved in the process.

With support from UNDP's Capacity 21 programme, the National Council of Environmental Management (CONAGESE) created a decentralized mechanism to facilitate national-to-local information sharing through a pyramid of steering committees. Comprising representatives from all sectors, these covered the national, regional, provincial, department and village levels. For two years, the committees held discussions with citizens at every level on how to combat desertification through sustainable development.

The programme focused on enabling local communities to take responsibility for managing natural resources sustainably. In some cases, this meant correcting widely held misconceptions that had led to the failure of past attempts to combat desertification. For example, tree-planting campaigns had not worked. So efforts were made to explain how trees could provide more than just firewood; that planting trees could protect and improve the soil, and improve agricultural production.

The pyramid of committees functioned as a cascade of information sharing, focusing especially on strengthening development planning and resource management at the village level. The national committee trained the regional committees, which trained provincial committees, which, in turn, trained departmental committees, which then trained village committees. The latter consisted of 5 to 10 people, one of whom was literate and acted as secretary. The committees constituted the nucleus of the system of local governance and local action plans on which the country's rural development strategy is based.

Advocating an integrated approach to development was central to the programme's communication strategy, which was designed to provide information about sustainable development to all stakeholders, rural and urban, educated and illiterate, from the general public to the national school system to the private sector.

Booklets, posters, music and a quarterly environmental magazine were produced, and journalists were trained in environmental reporting. Rural radio programmes on sustainable agriculture were launched, as well as 'theatre-fora', in which travelling actors put on plays to highlight development issues.

People learned that fighting desertification is more than one isolated activity and that it is necessary to integrate activities such as planting trees, building little stone walls, using fertilizer, conserving water and soil and working together cohesively.

The campaign led to clear changes in people's thinking and behaviour. Fewer trees were cut down to make new fields and people stopped burning brushwood. Compost heaps were prepared in most villages. Villages began to develop their own integrated development plans to make changes happen.

A key player in the multi-level process of awareness raising and information sharing was COPODE (Committee for NGOs Fighting Desertification), which trained 114 NGOs from around the country in ways to promote dialogue on sustainable development at the village level. With support from Capacity 21, COPODE produced thousands of copies of simplified, illustrated versions of the Convention to Combat Desertification in Burkina Faso's four national languages. This helped ordinary people to take ownership of the country's response to the convention.

Source: UNDP Capacity 21 (www.undp.org/capacity21)

In order to establish which media provide the most effective communications channels for each stakeholder group, it is important to do the following:

- *Undertake a comprehensive needs analysis:* The IEC action plan should identify specific stakeholder groups, the most suitable media to reach these groups, and ways to link them together. In developing the plan, reliance should not be placed on assumptions. A stakeholder analysis and associated 'needs analyses' will help to validate initial assumptions, identify gaps in information flows and suggest innovations that encourage stakeholders to actually use the information.
- *Ensure that the media empower stakeholders and enable strategy improvement:* Effective communications will empower individuals and groups, enabling them to use their skills and resources and identify new ways of working together. The media selected should, therefore, be of a type that best enables participating groups to communicate what they feel, what they know and what they want – as

well as to best understand what the strategy is all about. When using the print, electronic and traditional media, and in the education system, it will be important not to restrict the role of these various media to delivering strategy 'messages'. As far as possible, media roles should encompass those of strategy critic, monitor and solicitor of opinions.

- *Multiple media will be needed:* Stakeholder groups may exhibit different attributes, from hierarchical to egalitarian in nature, and from task-orientation to people-orientation. Information will flow in and out of such groups in different ways. Each group will also have its preferences and dislikes for media. Thus the diverse stakeholders of a strategy will require diverse communication media, according to country and locality circumstances, topic, audience/participant group and cost considerations. Many of these media may be new to strategy staff.
- *Cost/benefit analysis of media:* The costs and benefits of alternative media need to be assessed. Hidden benefits should be included, especially on the user side. For example, e-mail can appear very cheap, but some users – particularly in remote areas in developing countries – may have to travel to an urban centre to use a computer charged on an hourly basis with a poor connection. In such cases, a letter, a telephone call, or a community meeting, entertainment and performing arts, and involvement of extension agents and NGOs, may be the most appropriate approach.

All materials should be available in local languages (where appropriate) and should develop and promote the strategy's identity. The latter is important if an 'umbrella' approach is taken; that is, products produced by many government departments and other stakeholders through the NSDS process.

Documents and audio-visual material

These can include:

- The strategy prospectus and summaries based on it – setting out such matters as the aim of the strategy, the processes involved, how to participate or the schedule of steps/events. An outline of such a prospectus is given in Box 7.10.
- Briefing documents (on issues, options, and initiatives; some of a general nature, others for particular target groups; both regular and one-off).
- 'State of environment and development' reports and maps.
- Regular newsletters and news releases.
- News releases.
- Videos and multimedia presentations.
- Training and resource packs (for participants and others).
- An overall strategy document setting out the broad vision, rationale, objectives, system to address them and outline plans.

The strategy is not a 'document' – but documents are useful tools for the strategy

Although it is commonplace to refer to a strategy document as 'the strategy', this is misleading and encourages people to expend excessive efforts in preparing papers instead of establishing the mechanisms to develop the strategy and its outcomes. Documents are only intermediate products or 'milestones' of the process – the means to an end. Nevertheless, documents (whether hard copy or electronic) are essential tools for the effective preparation and implementation of a strategy. They enable (literate) participants and others, and especially policy-makers and decision-takers, to understand the vision and objectives, know what is happening, what has been agreed and what is expected of them. Without documents, a strategy may quickly lose coherence and fragment into ad hoc decisions dictated by the immediate needs of the government department and other national agencies concerned. Some NCSDs, for example, have suffered

Box 7.10 Outline of the prospectus for the Canadian *Projet de société*

The Canadian *Projet de société* was initiated in 1992 as a Canadian response to UNCED and Agenda 21. It was coordinated by the National Round Table on the Environment and the Economy (NRTEE) and was concerned with sustainable development issues at national (not just federal) level, resulting in a strategy document, *Canadian Choices for Transitions to Sustainability* (Projet de société, 1995).

A prospectus was issued in 1994. This introduced the initiative, described its work and invited the participation of interested parties in future activities. It described the initiative as a multi-stakeholder partnership of government, indigenous, business and voluntary organizations, committed to promoting Canada's transition to a sustainable future, and set out its primary role as a catalyst for change, recognizing that sustainable development is a collective responsibility of all Canadians.

The prospectus explains that the first year involved an assessment of Canada's progress since UNCED, the drafting of a framework and process for a national strategy for sustainable development, and the initiation of a series of practical actions to advance various elements of this approach. The prospectus marked the movement of the process into a more substantive programme of activity, including communication, planning and demonstration components to foster sustainability as a national mission. The documents issued an invitation to all interested institutions and individuals to participate in the work of the *Projet de société* and to invest ideas, skills and contributions to the task of planning for a sustainable future. The prospectus was set out in various sections:

- The Earth Summit and beyond – why we must act.
- *Projet de société*: Planning for a sustainable future – what we want to achieve.
- Towards a National Sustainable Development Strategy – how we are approaching the challenge of changing course (includes principles and characteristics of the initiative).
- Progress to date – describes work already undertaken (see previous paragraph) (includes chronology of the *Projet de société*).
- Next steps – where we are going (describes the broader process and opportunities for collaboration and initiatives by existing stakeholders and other interested parties; and discusses building public awareness, information sharing and networking, outreach and facilitation, designing a strategy, convening a national dialogue, catalyzing preparation of sustainability strategies in sectors and communities and learning from experience).
- Resource requirements – what we need for the task ahead.
- Strategic alliance – who should join the *Projet de société*.

Source: *Projet de société* (1994)

from the lack of strategy documentation: this has made them appear opaque to some groups; and the lack of a clear plan may have contributed to rather passive or reactive approaches to their work.

However, information overload must be avoided. Although analyses, records and investment portfolios will require detailed documentation, the key strategy documents should not be too lengthy. Coherence, consensus and clear direction are important features of a strategy and the key documents will need to express these features. Everyday language, charts, maps and illustrations will help.

To be most effective, the central strategy document needs to be published and widely available in final approved form. Government agencies, local authorities, major NGOs and many businesses will need the full document. But highly technical reports are not useful for politicians, busy decision-makers, community interest groups and the general public. The main strategy documents may need to be presented in different forms, each targeted to a particular audience.³ However, it will be important to ensure that the different documents do not send contradictory messages.

Condensed information can be made available to the public – in local languages where appropriate – and to schools and universities where it can promote debate about issues to be addressed by the strategy –

³ There is often a shortage of people with the skill to write well and clearly. It may be necessary to engage communications specialists with the appropriate writing and presentational skills, to develop products that adequately meet their purpose and serve their target audiences well.

Short documents tend to be best, but stakeholders also need access to the full information sources

Events can be powerful – but are expensive and so need careful justification and planning

helping to strengthen the key competences of students, tomorrow's leaders (eg innovation, questioning, communication, change management, strategic thinking/planning and leadership).

Electronic versions could usefully be made available on the strategy website and periodic CD-ROMs (see page 246) and audio and video versions could also be produced (for example, as done for the Pakistan NCS and Local Agenda 21s for UK authorities). With a premium being placed on concise documents, complementary access to the full strategy knowledge base, perhaps through the strategy website, would both contribute to improved transparency and enable stakeholders to engage further.

Events

During the development and implementation of the strategy, the secretariat will need to organize various events that aim to improve communication of concerns, issues and ideas among stakeholders, and to disseminate strategy objectives. Meetings often form milestones in a strategy process – and thus need to be judiciously timed and planned, especially as they can form a large proportion of the strategy costs.

- *Briefing meetings for decision-makers* on strategy issues, recommendations, progress and remaining issues. Equal attention should be given to conceptual clarity and good and timely local case material. Costs, risks and benefits should be outlined.
- *Briefing meetings for the mass media and traditional media.* Here, the challenge is to create a newsworthy story from what can seem to be a large and heavy agenda, and to be able to complement this with good contacts to enable the media to pursue the story further and thus contribute to debate, analysis and ideas. Once sensitized, the media can also help to promote dialogue between stakeholders (letters to the editor, opinion pieces, etc) and increase accountability. Journalists have played strong roles in some strategies, such as one of the provincial strategies under the Pakistan NCS (see Box 7.11).
- *Public meetings.* These can surface widespread concerns – as illustrated in the case of St Helena concerning the environment (Table 7.2). Here, clarity on the purpose of the meetings and strategy organizers' expectations is key, as is good notice for the events, accessibility by stakeholders, and follow-up reporting and its dissemination. Care is needed in organizing the agenda; this and the political framework for the event can often dictate the outcome and restrict honest debate. It is important to consider how the results of public meetings can be effective and have an impact on the development of the strategy, on policy-making and decision-taking, and to explain this.
- *Training workshops.* Some training workshops will be directly the concern of the strategy (providing training, for example, on what the strategy process is all about and how particular interest groups

Box 7.11 Support services for journalists and NGOs, Sarhad Provincial Conservation Strategy, Pakistan

One of the challenges for the Sarhad Provincial Conservation Strategy (SPCS) has been to help its constituency to grow outside the government system, as well as within it. Both the Frontier Forum for Environmental Journalists (FFEJ) and the Frontier Resource Centre for NGOs and CBOs (FRC) were given considerable strategic boosts by the SPCS. FFEJ holds courses for journalists in the province to familiarize them with environmental issues (for which the journalists pay) and is resulting in an increasing body of stories on sustainable development being placed with the media. The Urdu press in particular is being targeted. FRC offers training, research and documentation and networking services, with a concentration on practical local sustainable development. The work of these support services, plus the SPCS issues roundtables, is building up expectations of improved government–civil society partnerships in decision-making, and expectations of improved transparency – which will help to drive the SPCS. Something similar is needed for the private sector and banks, individual members of which have been expressing interest through the roundtable.

Source: Hanson et al (2000)

Table 7.2 Public concern survey on the environment in St Helena

Rank/issues raised	Forum															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Government closed shop	–	*	*	*	*	–	*	*	–	*	*	*	–	–	*	10
2. Agricultural/food security	–	–	–	–	*	*	*	–	*	*	*	*	–	*	*	9
2. Research/education	*	*	*	*	–	*	–	*	–	–	*	–	–	*	*	9
2. Soil erosion	*	–	*	–	*	–	*	*	*	*	–	–	–	*	–	8
2. International pollution	*	*	*	–	*	*	–	*	–	–	*	–	–	*	–	8
2. Apathy among populace	–	*	*	–	*	*	*	–	–	–	–	*	*	–	*	8
3. Water shortage	–	*	*	*	–	–	*	*	*	*	–	–	–	–	–	7
3. Living costs	–	–	–	–	*	*	*	*	*	*	*	–	–	–	–	7
3. Too many consultants	*	*	–	*	*	–	*	*	–	–	–	–	–	*	–	7
3. No cash for environment work	*	–	–	*	*	–	*	–	–	*	*	*	–	–	*	7
4. Unemployment	–	–	–	–	*	–	*	*	*	*	–	–	–	–	*	6
4. International overfishing	*	–	–	*	*	*	–	–	–	*	*	–	–	–	–	6
4. Lack of continuity	*	–	–	*	*	–	*	–	–	*	–	–	–	*	–	6
5. Increased water cost	–	–	–	*	–	–	*	*	*	*	–	–	–	–	–	5
5. Cactoblastus killing Opuntia	–	*	–	*	*	–	*	–	–	*	–	–	–	–	–	5
5. Organic matter	*	–	*	–	–	*	–	–	*	*	–	–	–	–	–	5
6. Increase in number of pests	–	*	*	–	–	–	*	–	–	–	–	*	–	–	–	4
6. Local pollution	–	–	–	*	–	*	–	*	–	–	*	–	–	–	–	4
6. Flax mulch/soil conditioner	–	–	*	–	–	–	*	–	*	*	–	–	–	–	–	4
6. Land use strategy	*	–	–	–	*	*	–	–	–	–	–	*	–	–	*	4
7. Lack of fishing fleet	*	–	–	*	–	*	–	–	–	–	–	–	–	–	–	3
7. Recreational facilities	–	–	–	–	–	*	–	*	–	–	–	*	–	–	–	3
7. 3-day labour	*	–	*	–	*	–	–	–	–	–	–	–	–	–	–	3
7. Natural regeneration	–	–	*	–	–	*	*	–	–	–	–	–	–	–	–	3
7. Taxes, esp land tax	*	–	*	–	–	–	–	–	–	–	*	–	–	–	–	3
7. Global climate change	–	*	–	–	–	–	*	–	–	*	–	–	–	–	–	3
8. Water quality	–	–	–	*	–	–	–	*	–	–	–	–	–	–	–	2
8. Building heritage	–	–	–	*	–	–	–	–	–	–	–	*	–	–	–	2
8. Nature trails	–	–	*	–	*	–	–	–	–	–	–	–	–	–	–	2
8. Legislation	–	–	*	–	*	–	–	–	–	–	–	–	–	–	–	2
8. Videos	*	–	–	–	–	*	–	–	–	–	–	–	–	–	–	2
8. Drought	–	*	–	–	–	–	–	–	–	*	–	–	–	–	–	2
9. Absentee landowners	*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
9. Road condition	–	–	–	–	–	*	–	–	–	–	–	–	–	–	–	1
9. School closure	–	–	–	–	–	*	–	–	–	–	–	–	–	–	–	1
9. Lack of finance	–	–	–	–	–	–	–	–	–	–	–	*	–	–	–	1
9. Removing historical remains	–	–	–	–	–	–	–	–	–	–	–	*	–	–	–	1
9. Spear fishing	–	–	–	–	–	*	–	–	–	–	–	–	–	–	–	1
Number present	7	13	8	16	11	7	7	9	6	14	6	4	3	5	15	131
Sex – male	2	7	3	11	7	3	2	6	5	12	6	1	3	3	10	81
– female	5	6	5	5	4	4	5	3	1	2	0	3	0	2	5	50
Age <30	0	2	1	3	2	2	2	2	0	2	0	0	0	1	0	17
30–60	6	7	7	10	8	2	4	5	5	9	6	2	1	4	14	90
60+	1	4	0	3	1	3	1	2	1	3	0	2	3	0	1	25

Notes: Bold items are, or are influenced by, international affairs. The fora listed above are detailed below

The small island of St Helena (population 5000) is an Overseas Territory of the UK, located in the remote southern Atlantic Ocean. It has a rich endemic fauna and flora, but suffers from severe land degradation, limited development options, and is highly vulnerable to external actions and decisions.

A process was started in 1993 towards developing a Sustainable Environment and Development Strategy (SEDS). Initially, a six-week scoping exercise was conducted, facilitated by a team from the Royal Botanic Gardens, Kew and IIED. The exercise was cross-sectoral and inclusive of all government departments, the private sector, NGOs and the public. It involved a wide range of surveys and data-gathering exercises and consultations; for example, numerous official meetings and 13 public meetings (listed below), visits to farmers and smallholders, phone-ins, school painting competitions and seminars, and ad hoc discussions.

The following public meetings and other activities were organized – as numbered in the table: (1) Alarm Forest (the Briars) Community; (2) Half Tree Hollow Community; (3) Longwood Community; (4) Kingshurst (St Pauls) Community; (5) Levelwood Community; (6) Blue Hill Community; (7) Jamestown Community; (8) Sandy Bay Community; (9) Farmers Association; (10) Smallholders; (11) Fishermen’s Association; (12) Heritage Society; (13) Church Group; (14) Radio Phone In; (15) SEDS Seminar. The issues raised were both national and international in scope. The team ranked them after placing them in context together with information from the diversity of other methods used to assess islanders’ opinions and attitudes, for example, questionnaires

Source: Royal Botanic Garden Kew and IIED (1993)

can engage effectively in it and present their views, on sustainable development concepts and key issues, and on methods for analysis). But there will be many other training workshops organized elsewhere, which also present opportunities for improving understanding of sustainable development and the strategy. As they are all focused on change, they present opportunities for contributing to the NSDS process.

- *Share fairs.* These are where various stakeholders display their outputs and information in a type of information ‘market’. The meeting is open to all and people are encouraged to discuss and share their work in a non-formal manner. This can help to build consensus on priority areas of action. It also supports a growing body of valuable information about approaches that can be adopted by others facing similar challenges.
- *Formal and informal exchange visits and study tours.* These often work well with mixed groups from a particular region or strategy and encourage learning and building of trust relationships. Such visits enable the participants to see how strategy processes have been organized elsewhere; to compare issues, challenges, solutions, and so on, and to learn from strategy experience in other countries/areas with the aim that the individuals will be able to engage better in their domestic processes.

Some events are often expensive to run, can include relatively few people and therefore should be balanced against maintaining cheaper information activities. Often meetings are held in major capitals and urban centres; locating events equitably across the country will encourage greater participation and ‘ownership’. So also could integration with events held for other purposes. Alternatives may be considered if they are suitable to stakeholders and to the task in hand: for example e-mail conferences and the other media described in this section.

Ground rules for strategy meetings can get better strategy results – and contribute to an improved climate for stakeholder participation

MANAGING DIALOGUE AND CONSENSUS-BUILDING DURING MEETINGS

Many of the strategy tasks involve meetings. The way in which communication is conducted within those meetings will have significant implications for the success of the strategy. For working groups to be effective, it has been found useful to agree ground rules of communication, especially for the purpose of dialogue and/or consensus building. Participants must assume that no one has all the answers. In its study of multi-stakeholder processes, UNED Forum (2001) suggests some ground rules for meetings (Box 7.12).

Establishing networks, or making links with existing networks

The term ‘network’ is frequently used to describe different types of organizational or individual relationships. Networks are primarily formed by individuals from different organizations or from departments within large organizations and can often be confused with other types of organizational relationships such as alliances, coalitions, associations and federations. The structure of these forms depends to a large degree on the basis of unity, that is, to what degree the organizations and individuals share common aspirations and challenges. Alliances, for example, are often short-lived, as they form around a particular issue and then dissolve, whereas coalitions and federations create more permanent secretariats with sophisticated information and communication channels. If such groupings start to support the strategy, they are able to bring with them their own organizational members, branches, political influence and technical knowledge as well as their multiple information channels (Wilson 1993).

Networks may be both formal and informal in nature. There are a number of types of ‘network’ that it may be helpful to involve in the strategy:

- *Policy communities* that focus on specific subjects for specific reasons (see Box 5.5), and work through an established medium (eg e-mail) can be very supportive. Such ‘communities’ will exist both

Existing ‘policy communities’ and professional networks provide ready channels for NSDS communications – many of them welcome the broader NSDS strategy process

Box 7.12 Ground rules for meetings

In a study of multi-stakeholder processes, UNED Forum (2001) noted that the following communications 'rules' have proved effective:

- 1 During discussion, participants must make every effort to be as frank and candid as possible, while maintaining a respectful interest in the views of others. An atmosphere that cultivates **directness, openness, objectivity, honesty, trust and humility** is important.
- 2 All participants need to be open to change when embarking on a communication process as outlined above. A true dialogue cannot be entered into with the goal of 'getting one's way'.
- 3 To help understanding and clarify perceptions, participants and facilitators should be encouraged to restate one another's views in their own words (**'active listening'**).
- 4 Participants should refrain from presuming motives of others and rather be encouraged to **ask direct questions**.
- 5 Participants are asked to **address the group as a whole**, while showing concern for each point of view, rather than confronting and criticizing individuals.
- 6 Participants must argue on a **logical basis**, giving their own opinion but also seeking different views.
- 7 **Brain-storming** can be helpful: conducting a session of putting forward ideas and collecting them without judgements for later discussion can create a larger pool of ideas. When an idea is put forward, it becomes the property of the group.
- 8 Participants should consider conducting a **learning exercise**, to draw out the success factors of other processes and agreements and use the outcomes to deepen the pool of ideas.
- 9 Allow space and time for **various modes of communication**, socio-emotional as well as strictly task-oriented.
- 10 If participants feel that others are **not playing by agreed rules**, they need to put that to the group and the group needs to address the problem.

These points are all well and good but other factors are often overlooked – meeting location, style of location and the culture of the various participants. As much as possible, meetings should be spread equitably across the country in locations that encourage the full participation of the participants and not just cater to the vanity of important personalities. As one author notes (Barnard 1995), 50 per cent of time spent in meetings is wasted but the difficulty lies in determining which 50 per cent!

Furthermore, rules might be developed on **recording and reporting** – for example, where to attribute opinions (after major consultation exercises, responses need to be classified according to specific groups) and where not to (for example, public reports of round table meetings). In some cases, this may require a high degree of confidentiality. The Chatham House rule is one such tradition and is widely used in other settings.

The Chatham House rule

Meetings of the [Royal Institute for International Affairs, London] may be held 'on the record' or under the Chatham House rule. In the latter case, it may be agreed with the speaker(s) that it would be conducive to free discussion that a given meeting, or part thereof, should be strictly private and thus held under the Chatham House rule.

When a meeting, or part thereof, is held under the Chatham House rule, participants are free to use the information received, but neither the identity nor the affiliation of the speakers, nor that of any other participant may be revealed; nor may it be mentioned that the information was received at a meeting of the Institute.⁴

A similar tradition was used by Filipino community development workers from different political persuasions under the Marcos dictatorship to allow for debate and building consensus while providing self-protection and confidentiality.

formally (see, for example Box 7.13 for Bolivia) and informally (many advocacy groups which come together now and then to pursue their interests).

⁴ Royal Institute of International Affairs (RIIA): www.riia.org/meetings/rule.html

Box 7.13 Some existing networks in Bolivia

In Bolivia, there are networks and associations on strategy-related issues, which provide information, promote capacity strengthening, mobilize joint initiatives, and act as fora for discussion and focal points for dialogue with the central government and other actors. These can be useful assets for a strategy. There are two key networks:

The Federation of Municipal Associations of Bolivia (FAM-Bolivia) comprises all the Municipal Associations in each region. It represents the municipalities and their interests, requests and needs. Its goal is to consolidate the decentralization process, strengthen representative and participatory democracy, and bring about a multi-ethnic, efficient, transparent, participatory state – largely by promoting municipalities’ institutional development. As a result of the DAC dialogue workshops on NSDSs organized in Bolivia, networks for strategic planning have been established in two regions and in La Paz, and are being developed in other regions, with support from FAM, NGOs and others.

National Environmental NGO Network: LIDEMA – League for Defence of the Environment – aims to improve the quality of life for Bolivians and promote citizen participation in identifying and addressing environmental problems. Members promote a policy of coordination with government and other civil society organizations. This has resulted in their broad participation in the development of environmental laws, the National Environmental Action Plan, the environment dialogue and the National Dialogues I and II. LIDEMA played an active role in voicing environmental concerns, encouraging more concerted government action for environment and sustainable development (including legal and institutional aspects), raising public awareness and building capacity. It has promoted the establishment of a Forum for Environment and Development and an information centre for industry.

- *Communities of practice* or networks, which comprise a range of people and institutions from different practice areas, such as knowledge networks,⁵ education specialists, ‘extension’ agents and business representatives, who keep each other more loosely informed about development in a range of areas can also be useful.

Chapter 5 (Analysis) looks at how to identify them and bring them into the strategy process (see pages 120 and 170). We must be wary of creating alternatives to these, but this may be necessary where none exist or where change is required because of, for example, entrenched positions or inertia.

The Roundtables established in Canada for the *Projet de société* are good examples of effective networks in a country with sophisticated communication facilities (see Box 6.24); Box 7.14 lists some of the benefits and problems of networks.

Care should be taken to identify each network’s information and communication needs (whether formal or informal, national or local) as well as building rapport and trust with the key contacts in such groupings. In each, information and knowledge is shared in different ways depending on the levels of interdependence and trust, so a different strategy to work with different groupings will often be required. Unfortunately, there remains relatively little documentation of working with, and maintaining, such networks and partnerships.^{6,7,8}

⁵ *Knowledge networks* are engaged in moving knowledge into practice and to broad audiences (see Creech and Willard 2001). Examples include: Pan Asia Networking (PAN) and Bellanet of the International Development Research Centre; Global Knowledge Partnership and Global Development Network of the World Bank; Sustainable Development Communications Network hosted by the International Institute for Sustainable Development; and the Regional and International Networking Group (RING) hosted by the International Institute for Environment and Development.

⁶ For example see Starkey (1998); Edwards and Gaventa (2001); Keck and Sikkink (1998).

⁷ The International Institute for Sustainable Development in Canada has supported much research into how to increase network members’ impact on policy and practice: <http://iisd1.iisd.ca/networks/>

⁸ See Cala and Grageda (1994) for an interesting review of national level networks in the Philippines, which provides an insight into the dynamics of alliances and coalitions from the views of the members themselves.

Box 7.14 Benefits and problems of networks**Benefits of networks**

- Networks facilitate exchanges of information, skills, knowledge, experiences, materials and media, through meetings, workshops, publications and cooperative programmes.
- Network information exchange and coordination leads to less duplication of work and effort.
- Networks link people of different levels, disciplines, organizations and backgrounds who would not otherwise have an opportunity to interact.
- Networks can create an awareness that others have similar concerns and developmental problems.
- Networks can provide the critical mass needed for advocacy, action and policy change.
- Networks can help to address complex development problems and issues that seem overwhelming to those working at only one level.
- Networks can bring together funding and technical cooperation agencies and those in need of resources and support.
- Networks can provide members with a source of peer support, encouragement, motivation and professional recognition.

Problems of networks

- membership disparity;
- thus a potential lack of clear objectives;
- domination and/or competition;
- donor interference;
- centralization and bureaucracy;
- lack of resources, or manipulation of resources;
- difficult monitoring and evaluation.

Source: Adapted from Starkey (1998)

Finally, network capacity can be enhanced and interest and motivation promoted by sharing experience with those involved in other strategy processes. There is much to gain from South–South and South–North learning between networks of strategy practitioners. There is a growing number of such networks interested in NSDSs and similar strategic approaches (Box 7.15). A number of them have established websites to facilitate information sharing (eg www.nssd.net).

The Sustainable Development Networking Programmes in Pakistan and China (Box 7.19) are good examples of how, through using internet technology, developing countries can access information and share good practices, lessons learned and know about sustainable development. This is a growing area, with huge potential to stimulate lasting change (for further information, see www.sdn.undp.org/).

Establishing databases, or making links with existing databases

Databases are computer programmes that can retrieve and manipulate data, text and other forms of electronic elements such as graphics. Electronic databases, which can come in many diverse forms and sizes, are invaluable tools to support the development of strategies. Properly structured and updated, they can provide accurate and up-to-date information to the user.

Databases commonly hold information such as contact data, financial and statistical information and geographical information (see, for example, the case of China’s Sustainable Development Information website, Box 7.19). Some databases hold meta-data (‘information about information’), with details of important information sources including other databases and resource centres, as a ‘sign post’ to other sources of information. Apart from the costs of software and training, databases can be very expensive to maintain owing to the human cost of data maintenance, so it is imperative to maximize their use by increasing access to strategy stakeholders as much as possible.

The international networks of strategy practitioners are useful resources for a strategy secretariat

Many useful sustainable development databases are becoming available internationally

Box 7.15 Some examples of strategy practitioner networks

IUCN: In the early 1990s, IUCN organized several informal regional networks for strategy practitioners and experts. These served well to share experience and generated many of the basic lessons on best practice that form the OECD DAC principles (Box 3.1).

RedLat: For example, the RedLat (Red Latinoamericano de Estrategias para el Desarrollo Sostenible) was helped by IUCN. It has met five times since 1994. A core group of practitioners involved in some 25 sub-national and local strategies in 14 countries discuss common issues and share lessons learned. These lessons are maintained on a website and there is a lively electronic network with over 1200 users in Spanish-speaking countries. RedLat has organized thematic workshops on tools for sustainable development, and organized South–South visits to exchange field experience.

The Network for Environment and Sustainable Development in Africa: NESDA was established in 1992 with World Bank sponsorship and assists African governments, institutions, the private sector, NGOs and local communities in capacity building for strategic planning and implementation. Initially focused on NEAPs, its remit is now much broader.

Earth Council: Based on resolutions of the International Forum for National Councils for Sustainable Development (NCSDs) (April 2000), the global network of NCSDs is undertaking a multi-stakeholder assessment of the Earth Summit commitments. Various regional NCSD groups meet regularly to share experiences. They vary in their effectiveness as well as in their adherence to the principles of NSDSs. Nevertheless, they are a useful first point of contact to support and help NCSDs to evolve.

Capacity 21: UNDP has also developed extensive networks of people involved in sustainable development strategies around the world through its work on Capacity 21.

The International Network of Green Planners: INGP was founded in 1992 as an informal network of practitioners from around the world involved in developing and implementing plans, strategies and policy frameworks for sustainable development. In April 1998, the INGP was converted into a formal membership association. A global conference is organized every 18 months with intermediate regional meetings (www.greenplanners.org).

Source: www.nssd.net

This can be done by putting material extracted from the databases on websites, distributing them on CD-ROMs or sending lists of updated information to potential users through newsletters and e-mail.

An example of a relatively simple and straightforward on-line database is that of the International Collective in Support of Fishworkers' on-line documentation centres (www.iscf.org). Another more complex and very powerful example is ELDIS (www.eldis.org), maintained by the Institute of Development Studies, UK. By October 2001, ELDIS had reviewed over 6400 documents, listed 3423 organizations and had over 120,000 web pages.

Whatever the database strategy adopted, it remains critically important to provide high quality and up-to-date information.

Use of electronic media

Once information is in digital format, it can be very cheaply manipulated into various media, for example e-mail and attachments, websites and CD-ROMs. This may include not only text-based information but also graphics, video and sound. Depending on the target groups, technological capacity and access, a variety of these forms can be used (see Table 7.3).

If useful, the IEC team might establish and operate a *website* at a reasonable cost. This can be used both as an information source for all interested parties and as a communication tool. A frequently updated website allows the strategy to be open to input from stakeholders who are not able to participate directly in the process. It could be complemented by regularly updated *CD-ROMs* containing key information on the

Improving internet connectivity can be a valuable investment for strategy stakeholders

Table 7.3 The choice of electronic media will be determined by access costs and speeds to the internet

Choice electronic media	No internet connectivity	Poor internet connectivity	High internet connectivity
CD-ROM	✓	✓	✓
E-mail		✓	✓
Internet browsing of web-based information			✓

✓ = suitable medium

strategy process and its products. The CD-ROM could simply duplicate the most useful website material.

To date, most websites associated with particular strategies have tended to be used mainly to post brief descriptions or the full text of strategy documents (some examples are listed in Box 7.16). Only a very few websites have been used actively to aid communication and involve stakeholders during the strategy development process itself – a good example is the website of the National Assembly for Wales (Box 7.17).

The IEC team can also use the other electronic means to encourage and enable debate and information exchange; for example, e-mail discussion lists/groups (moderated or not) or e-mail newsletters. But, in using such electronic forms of communication, it needs to be borne in mind that many stakeholders (particularly the poor and those in remote areas) may have limited or no access to computer equipment and the internet (Box 7.18). Table 7.4 shows how use of the internet varies according to regions, with least use in Africa and the Middle East.

In developing countries, the best approach might often be to link the narrower information needs for coordinating an NSDS with a broad-based internet resource that serves many pro-sustainable development purposes; for example, improving stakeholder interconnectivity and improving access to sustainability information. UNDP's Sustainable Development Networking Programme has helped to play such a role in several countries (Box 7.19).

ELECTRONIC DEMOCRACY

Electronic democracy and *electronic governance* describe new forms of citizen communication and popular participation in government. These concepts are heralded as means to use communications media to democratize information and participation in decision-making. 'Electronic governance is not about putting data on websites, but about changing the political and institutional structure so citizens can access needed information' (Susana Finkelievich, University of Buenos Aires).

'Electronic democracy' is on the rise; a communications strategy needs to think through its many implications

Table 7.4 Users of the internet (February 2000)

Region	Numbers (millions)
USA and Canada	135.06
Europe	71.99
Asia/Pacific	54.90
Latin America	8.79
Africa	2.46
Middle East	1.29
Total	274.49

Source: UNDP (2001b)

Box 7.16 Some examples of strategy websites**Bulgaria**

A site for local Agenda 21 and regional sustainable development strategy: www.Capacity21-bg.com

Canada

Each ministry in Canada has a website dedicated to its own strategy for sustainable development (see also Box 4.11). For example:

Environment – www.ec.gc.ca (French/English)
 Citizenship and Immigration – www.cic.gc.ca
 Industry – www.ci.gc.ca/SSG
 Fisheries and Oceans – www.dfo-mpo.gc.ca/sustdev/sust_e.htm
 Natural resources – www.nrcan.gc.ca/dmo/susdev

There are also regional sustainable development strategies. For example:

The Athabasca Strategy in Alberta, Canada – www3.gov.ab.ca/env/regions/

China's Agenda 21

National report and White Paper on China's Agenda 21: www.acca21.edu.cn/

India

A useful site is that of the Sustainable Development Networking Programme (India) operated as a joint initiative of the Ministry of Environment and Forests, UNDP and IDRC: <http://sdnp.delhi.nic/in/>

Scotland

The sustainable development strategy for rural Scotland is held on a site maintained by the Scottish Office: www.scotland.gov.uk/library/

Switzerland

The sustainable strategy of the Federal Council is available on www.buwal.ch/publikat/d/

United Kingdom

The site on the UK sustainable development strategy is maintained by the Department for Trade and Industry: www.dti.gov.uk

Uzbekistan

A site for the National Biodiversity Strategy and Action Plan: http://bpsp-neca.brim.ac.cn/books/actpln_uzbek/index.html

Cities and towns

Some cities and towns have also developed their own strategy websites, many of them connected to Local Agenda 21; for example, that for Sandwell in the UK: www.sandwell.gov.uk/smbc/susstrat.htm

Strategy initiatives in multiple countries

Information of a range of strategic planning frameworks is held on sites maintained by international organizations. For example, information on progress with poverty reduction strategies and the text of Poverty Reduction Strategy Papers can be found on the IMF website; for example, for Senegal, see www.imf.org/external/np/prsp/prsp.asp

According to UNDP (2001b), promoting information communications technology (ICT) as part of a social vision requires: the formulation of relevant public policy; new approaches to knowledge, learning and evaluation; and sensitive approaches to differential access, use and appropriation of ICTs. An ICT strategy that promotes equitable access to information could have the following objectives:

Box 7.17 The website of the National Assembly for Wales

The National Assembly for Wales is one of the few with a statutory responsibility for sustainable development (others include Estonia and Tasmania). It aims to add value to work done at the UK level on sustainability, building on the UK NSDS, and reflecting the needs of Wales. In January 2000 the Assembly launched its major consultation document *A Sustainable Wales – Learning to Live Differently* which sets out how it will meet its legal obligations on sustainable development.

The Assembly has actively used its website (www.wales.gov.uk/themessustainabledev/) to promote the development of a Welsh *Sustainable Development Scheme* (strategy) and to involve stakeholders in the process. The website gives information about sustainable development, what it is, the Assembly's duty to promote it and the action that is being taken to fulfil that responsibility.

The Assembly initiated a wide and proactive consultation process, which lasted for 3 months until April 2000. Several different ways of reaching people were used, aiming to persuade as many as possible to contribute. These included sending out 2000 copies of a consultation document and 1000 copies of its summary to a wide range of organizations and community groups. The consultation document, a leaflet about the proposals and other documents were placed on the Assembly's website which was also used for a moderated discussion forum. Braille, audio and large print versions are available from the website.

An important part of the consultation process were public meetings or 'Roadshows' held by the Assembly's four Regional Committees in February 2000. Organizations representing all sections of society attended and gave presentations and many members of the public gave their views to Assembly Members.

The Assembly received 161 responses to the consultation exercise: 80 by post, 52 through presentations at the Regional Committee Roadshows, 21 by post and presentation, 3 by e-mail to the Assembly's Sustainable Development Unit, and 5 via the website discussion forum. All of the individual responses and an analysis of them are presented on the website. Some of the key issues in the Analysis include:

- the relationship between the Sustainable Development Scheme and the Assembly's Strategic Plan – www.BetterWales.com;
- the main issues to be tackled to achieve a sustainable Wales;
- the need for a Sustainable Development Forum.

Most of the Assembly's Subject Committees considered a paper on the responses, and there was a Plenary debate in July 2000. Following this, the Assembly's Sustainable Development Unit redrafted the Scheme in the light of Members' wishes. The Scheme was subsequently debated and endorsed by the Assembly in November 2000. An action plan was launched in March 2001 and a first annual report on progress against commitments has been released for the financial year 2001–2002.

An important element of the draft Sustainable Development Scheme is the emphasis it places on finding ways to measure success in delivering a sustainable Wales and the need for monitoring and reporting on progress. The consultation process had sought views on a set of national sustainable development indicators for Wales, as well as on a broader framework for reporting on sustainable development.

Source: www.wales.gov.uk/themessustainabledev/

- Collaboration between private, public and civil society, with a transparent agenda and an informed strategy that draws on local knowledge.
- Strengthening of new skills and processes in order to transform public policy.
- Development of methodologies to produce and adapt information to convert it to knowledge.
- Documentation, communication and analysis of both positive and negative results.

Mass media

The local, national and regional mass media should be engaged as key stakeholders in the NSDS process. They can serve not only as reporters of news about strategy progress and sustainable development issues, but also to help set the agenda and promote dialogue. The media is no longer just an observer, but an actor for sustainable development.

Box 7.18 Some benefits and limitations of electronic communication

Focuses on the message content, not participant personality: Switching from face-to-face to electronic communication can provide a good basis for neutralizing differences in status and personality, as related to gender, age and ethnicity. Non-verbal stimuli like personal characteristics, such as charisma, mimic and gesticulation can be displayed less effectively in the process of communication and thus be less successful in preventing others from contributing/contradicting (Kiesler et al 1988; Hiltz and Turoff 1993). Representatives of groups with less status, such as women or members of ethnic minorities would benefit primarily from this filtering of personal characteristics. Without participants being physically present, more attention can be given to the contents of the communicative act (Turkle 1995; Geser 1996).

Supports diversity: Research suggests that IT-supported communication is more suitable for producing heterogeneity. Thus, the internet could be the ideal tool for collecting suggestions to a given problem in a brainstorming or for getting an overview of the diversity of opinions on a given subject matter. If the goal is to convince others or to generate unanimity, the internet would not be the most useful tool (Geser 1996; Kerr and Hiltz 1982; Sproull and Kiesler 1993).

Speed, low cost and global reach: Some multi-stakeholder processes have operated with massive use of the internet or even complete reliance on web-based information, including the channels for participants to provide input. There are numerous and significant advantages of internet-based information dissemination and communication. These include speed, low costs and the ability to inter-connect a theoretically unlimited number of people and stakeholder groups.

Access and equity problems: However, in countries with limited internet connectivity and disadvantaged social and linguistic groups (eg ethnic minorities, women, poor people), there are huge gaps regarding access to web-based information. These gaps cross traditional divides: between South and North, between women and men, between poor and rich, ethnic minorities and majorities, and so on (UNDP 1999; Paul 2000).

Source: UNED Forum (2001)

We have become accustomed to thinking of mass media as prime agents of change. They can and do contribute to change, and they have importance in raising the awareness of the general public and in influencing key decision-makers and opinion-formers. Yet, the transition to sustainable behaviour must take place at the local, community and individual level – and here ‘mass’ approaches have their limitations. That is not to say mass approaches cannot be adapted at the local level – feeding news and information to existing local newspapers and radio stations is often much appreciated. (See also page 240 on media events.)

Monitoring the communication process

Monitoring and evaluation in the field of information and communications is notoriously challenging. Those responsible for managing and implementing such programmes are often distant from those at the ‘user’ end of the communication ‘chain’. The changes in the knowledge, awareness and behaviour of the target group will be influenced by many factors other than the communications activities undertaken by the IEC team, so it is difficult to attribute those changes only to the information and communications strategy. In the context of multiple objective and process-orientated NSDSs, the requirement to support and adapt to rapidly shifting needs, expectations and requirements will be even more demanding and will need the establishment of mechanisms to monitor the progress of the communications process. The challenges of, and approaches to, monitoring and evaluation are discussed in Chapter 10.

If the IEC action plan has well-defined objectives and targets that are set in collaboration with the target groups themselves, then it is possible to prepare verifiable and informative indicators of impact and process towards the goal. It may not be necessary or indeed sensible to monitor all activities continuously, but without a predetermined system of some kind, little adjustment and verification will be possible.

The quality of communications is indicative of the vitality of the strategy process itself; regular reflection on it can help

Indicators can either be quantitative or qualitative, as well as process-oriented or impact-oriented (see Table 7.5).

In some circumstances, traditional readership surveys and resource centre visitor user forms still remain potent reactive measures for monitoring information impact. But in most others, more participatory approaches to monitoring and evaluation will be more appropriate (especially where the communication involves face-to-face meetings and conferences with groups and individuals who do not have access to adequate facilities).

Mechanisms will be needed to enable stakeholders to reflect on the process of communication itself – the procedures, choice of media, framing of messages and their participation (meta-communication).⁹ Mechanisms for meta-communication have been rare components of strategies to date, but it has sometimes happened spontaneously in an informal manner.

The IEC team can set up a process for meta-communication through feedback loops; for example, by facilitators asking for reflections on the process in meetings. All participants need to be included in such feedback exercises, and they need to be transparent and agreed on by the participants. Problems that might be identified then need to be collectively addressed in the fora to which they apply.

Table 7.5 Examples of possible indicators to use in monitoring and evaluating a strategy website

	Quantitative indicators	Qualitative indicators
Process-oriented	Return rate of users to website Time spent by users on site Monthly visitor numbers Number of documents downloaded Number of other websites linking to the strategy website Number of individuals requesting further information about the strategy after visiting website	Users' comments on navigability and web design Range of types of other sites linking to the main site Users voluntarily offer information to place on website
Impact-oriented	How often the documents were used by the users Number of times the documents were used in training packs	User views on the impact of website information

Note: Web management software packages are available that can track the process-oriented quantitative indicators. For other indicators, measurement processes will need to be developed including surveys and direct contacts with users

⁹ Meta-communication (from Greek 'meta' = higher) is communication about communication: exchanging information, views, opinions about the way we communicate in a given situation and structure. An important tool in communication processes, particularly where there is a high diversity of language, culture and background.

Box 7.19 The internet for communication, awareness raising and problem solving: UNDP's Sustainable Development Networking Programme. Examples from Pakistan and China

Pakistan

The information revolution accompanying the establishment of the World Wide Web and introduction of e-mail can be successful within countries only if there was good connectivity available at a reasonable cost. Most organizations require a shift in corporate culture in order to make the transformation. In 1992 the Sustainable Development Networking Programme (SDNP) was established in Pakistan through UNDP support. SDNP quickly became the country's leading advocate for maintaining internet access under reasonable financial terms, and itself established the early networks. It pioneered the pathway to electronic information networking within Pakistan, especially for development organizations. SDNP presents much potential as a communication tool about NCS objectives and implementation.

Today, the large private sector internet service provider (ISP) capacity has drawn attention away from SDNP's original roles. Now SDNP is beginning to concentrate on how to ensure better access to information on sustainable human development, for example, by creating a major website relevant to Pakistan's needs, and by building a within-Pakistan internet backbone that will reduce the costs of purchasing expensive international bandwidth. In the process, SDNP is seeking to become financially self-sufficient through the sale of various services. None of this is easy, particularly since there are formidable obstacles to reaching out to client groups who live well away from established data-ready telecommunication systems and who are hampered by low literacy rates and poverty. Thus SDNP, judged a great success for what it has already done in creating awareness and actual connectivity, faces a future where it must re-invent itself in a fashion that will serve sustainable development information needs in a much more equitable way. Its future role could be an extremely valuable adjunct to the devolution initiative now underway in Pakistan, and also to backstop state-of-environment reporting and other information dissemination needs of the NCS.

Source: Hanson et al (2000)

China

Each month, some 4 million people visit China's new Sustainable Development Information Website (www.sdinfo.net.cn). It contains 9 gigabytes of information, never before stored electronically, about China's natural resources, environmental protection and natural disasters, as well as demographic, economic, agricultural and meteorological data. With support from Capacity 21, in partnership with UNDP's Sustainable Development Networking Programme (SDNP), the Information and Networking Division of China's Agenda 21 (known as ACCA21) has coordinated the transfer of this data from government documents, and developed integration technologies that enable users to link and compare data from different sources.

Not only has the data been digitized; value has also been added through matching the digital data to Geological Information Survey spatial location data. Five thousand people access this map-based data every month. In addition, a standard template has been created so that data from a number of sources can be accessed simultaneously. Thus, for example, a user can compare forestry data with data on land use, water supply and weather patterns.

It is estimated that 40 per cent of users are private individuals, students or businesspeople, including NGO members. Another 30 per cent are from government agencies and academia, and the remaining 30 per cent are from overseas. One group that appears to be benefiting from the website is Chinese farmers – at least those with access to the internet. Farmers frequently seek information on inputs such as improved seeds.

Source: UNDP Capacity 21 (www.undp.org/capacity21)