

**SOCIO-ECONOMIC METHODOLOGIES  
FOR NATURAL RESOURCES RESEARCH  
BEST PRACTICE GUIDELINES**

**IMPROVED COMMUNICATION  
STRATEGIES FOR RENEWABLE  
NATURAL RESOURCE RESEARCH  
OUTPUTS**

**ANNEX: PRACTICAL ASPECTS OF  
COMMUNICATION MEDIA USE**

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## INTRODUCTION

This annex complements the Best Practice Guide *Improved Communication Strategies for Renewable Natural Resources Research Outputs*. Its purpose is to provide a practical guide to using different communication media, including their costs. It covers: face-to-face events, folk and live media, printed materials, broadcast media, on-line delivery systems, and video. All of these have been used by DFID Renewable Natural Resource Research Strategy (RNRRS) projects.

We give some examples of past use, as well as hints and references for effective and imaginative use of media in the future. The recommended reading lists are intended as pointers to those who wish to go deeper than this very brief overview allows. References to materials and websites about communication media in general can be found at the end.

## FACE-TO-FACE EVENTS

Generally speaking, there is nothing to beat face-to-face events, which include workshops, training, farmer field days and participatory rural appraisals (PRAs) – the virtual conference will probably never replace the old-fashioned meeting or workshop. However, good meetings, particularly in the case of workshops, where some sort of commonly agreed output is intended, need skilled facilitation (see IIED, 1997 for some hints).

### Checklist for workshops, training and PRAs

- The aims and the expected output are clear
- An appropriate language is used
- All participants are treated as equal partners
- Skilled and neutral facilitators are used
- The timetable is not overloaded with formal presentations
- Proceedings are made available to all participants and other potential users
- Contact numbers and addresses are recorded and circulated
- Participants are not too diverse
- There is plenty of time for discussion and for making contacts
- You provide conducive surroundings and appropriate refreshments
- Consider good handouts/support materials
- You record numbers and types of people attending for reporting purposes

### Advantages

- Workshops can elicit genuine participation by intermediate and end users
- Immediate feedback on an idea can be obtained
- They can establish good working relations
- They are good for professional networking
- They are effective in disseminating/demonstrating a tangible technique or technology
- They can be quoted as a project output

### Disadvantages

- Workshops can be expensive particularly if airfares are involved
- They are difficult to evaluate
- Participatory workshops may be intimidating to novices
- Workshops can sometimes be seen as just lip service to donor requirements

(With acknowledgements to C. Garforth, AERRD and H. Warburton and J. Morton, NRI.)

## FOLK AND LIVE MEDIA

“Folk media is a communication system embedded in the culture which existed before the arrival of mass-media and still exists as a vital mode of communication in many parts of the world” (Ranganath in Melkote, 1991).

Folk/live media includes drama, forum theatre, role play, music, puppets, mime, dance and story-telling. All can either be used in a didactic way to convey a message, or in a participatory manner to allow people to explore and analyse their own situations.

### Checklist for folk and live media

- Who is your target audience?
- What type of folk media are they used to, if any?
- Have you got access to local theatre/dance/puppetry practitioners, facilitators (folk media, by definition, cannot be done by outsiders)?

### Advantages

- Live drama, dance and music draws a crowd
- It can elicit a high degree of community awareness
- It can reach large numbers of people (at community level)
- It can have greater credibility than mass-media
- It is often relatively cheap
- It can be very memorable
- It can create much local goodwill
- It is particularly good for involving children and youth
- It is good for communicating non-technical messages (e.g. behaviour change)
- It is an option if audience is non-literate
- It can be good for exploring politically or culturally sensitive topics
- Role plays or skits can be used as an icebreaker at workshops
- It can serve as a tool for diagnosing communities' problems

### Disadvantages

- It can be seen as too childish – particularly puppets
- It can easily become top-down and paternalistic
- It is difficult/impossible to adapt beyond immediate context
- It is rarely suitable for imparting skills/techniques/technical information
- It is difficult to evaluate
- The entertainment may distract from the message
- Participatory drama is difficult to document by conventional means

### BOX 1: Examples of use of folk and live media

#### Dramas about sorghum in Kenya

In Kenya, a Crop Protection Project has been using plays performed by primary school children to communicate messages to their parents and community. The plays concern the control of kernel smut disease in sorghum.

The project recognized that field days were reaching only a small number of farmers. So a drama competition was organized with local primary schools in Mwingi District so that many more farmers – most of them parents of primary school age children – could be reached.

The attraction of modest prize money (£35 sterling) and the kudos of being associated with a foreign project was sufficient to involve the schools. In 1998, 50 schools put on plays, with over 100 farmers attending each performance. Farmers said they enjoyed the plays, and still remembered the event a year later. Extension workers say that the whole area is now aware of the disease.

The plays were very cost-effective; total prize money amounted to only a few hundred pounds sterling and project staff time was about 6 weeks in total (in a 3-year project). The number of farmers reached is estimated at several thousand.

Source: K. Wilson, pers. comm., NRI.

#### Forestry song about *Gliricidia* trees

In South India, a project on *Gliricidia* has commissioned a local NGO (BAIF) to produce songs and dramas to promote useful exotic tree species. BAIF has been successfully building on a well-established local tradition of live drama and song for some time. It costs the project about US\$150 to organize and pay the village youth to sing these songs accompanied by their traditional musical instruments.

This extract from a song about *Gliricidia* is sung during live performances during farmer field days. It was originally written in the Kannada and Marathi languages.

Grow *Gliricidia*, to meet your needs  
Use the cuttings or wholesome seeds  
Here's a green friend from the west  
Among the trees, it's one of the best

Source: Mahajan and Hugar, BAIF, India.

- It may be difficult to justify to donors
- It can sometimes be chaotic
- It can cause offence if used insensitively

#### Further reading on folk and live media

BRITISH COUNCIL (1995) *The Arts and Development*. London: British Council Publications.

BOAL, A. (1979) *Theatre of the Oppressed*. London: Pluto.

CHAMBERLAIN, R., CHILLERY, M., OGOLLA, L. and WANDERA, O. (1995) Participatory educational theatre for HIV/AIDS awareness in Kenya. *PLA Notes*, No. 23. (Available from the International Institute for Environment and Development, 3 Endsleigh St, London WC1H 0DD. Tel: 0207 3882117.)

EPSKAMP, K. (1989) *Theatre in Search of Social Change: The Relative Significance of Different Theatrical Approaches*. The Hague: Centre for the Study of Education in Developing Countries. (Available from CESO, Kortenaerkade 11, PO Box 29777, 2502 Lt The Hague, The Netherlands.)

MDA, Z. (1993) *When People Play People: Development Communication Through Theatre*. London: Zed Books.

MELKOTE, S. (1991) *Communication for Development in the Third World*. New Delhi/Newbury Park/London: Sage Publications.

IIED (1997) Performance and participation. *PLA Notes*, No. 29. London: International Institute for Environment and Development.

## PRINTED MATERIALS

Print is a versatile medium and covers a wide range of products (handbooks, booklets, leaflets, newsletters, posters, etc.). Printed materials can be used in a number of different ways. They can be used in their own right, or as support for other kinds of media in campaigns and in training situations. They can be short-lived, something to be read and thrown away, or they can be a permanent record to be used and re-used. They can be designed for individual use (a pocket book) or for use with groups (teaching charts) or crowds (posters).

### Checklist for printed materials

- Who is the target audience?
- What printed matter are they used to?
- What sort of look will they expect (e.g. glossy/commercial/basic photocopy/newspaper style/academic style, etc.)?
- How literate are they in relation to text, photographs, cartoons, pictures, diagrams, graphs, maps?
- Do you have time and money to research the above?
- Can you employ local writers/illustrators if necessary?
- In what context do you expect your printed matter to be used (e.g. in the field, classroom, at home, at conferences, etc.)?
- Can you develop the materials *with* your audience, testing acceptability of format, graphics and text at every stage?
- Have you considered printing costs (normally cheaper in developing countries)?
- Will users be able to obtain copies/duplicate your product easily and cheaply?

### Advantages

- A wide variety of different production processes, allowing the choice of the most appropriate for any given situation and other advantages
- A wide range of possible formats (handouts, workbooks, posters, etc.)
- The use of different materials (paper, cloth, plastic, etc.)
- Printed material can be produced to any level of sophistication and finish and suited to any audience
- No special rooms or facilities are needed to use printed materials
- People can use printed materials in their own homes, read at their own pace, and re-read as often as they want

### Disadvantages

- Printed materials may be fragile and susceptible to wear and tear
- They can be difficult to store as they come in all shapes and sizes
- Distribution may be difficult
- Long-term storage may be difficult due to bulk and susceptibility to heat, damp, etc.
- With largely non-literate audiences special care must be taken to create usable material
- Printed material can be viewed as impersonal and thus easily ignored

Print is the most commonly used medium for dissemination. Three main areas are covered below: (i) 'how to manuals', (ii) newsletters produced within a project, and (iii) posters.

#### (i) 'How to' manuals

##### Advantages

- Manuals/booklets can be continually referred to (unlike one-offs like a video or a classroom lesson)
- They have a long shelf-life
- They can obviate the need for training courses
- They can be highly treasured by recipients
- With good visuals, they can reach non-literate audiences

##### Disadvantages

- A manual/booklet will always be second-best to seeing/doing/working with the real thing
- Manuals/booklets can be difficult to target appropriately
- They can be expensive to produce
- Their production can take up a lot of staff time
- Training in their use may be needed

#### (ii) Newsletters

Newsletters can be hand-produced, typed, or a mixture of both. Most projects will probably have their newsletters designed and produced using basic word processing software, or a DTP system, and a photocopier.

##### Checklist for newsletters

- Do you have someone trained in the use of DTP software?
- Do you have someone trained in basic design skills?
- Is there support for software and hardware?
- Do you have a reproduction system available?
- Do you have a budget for staff-time to maintain a mailing list and for postage?

The disadvantages of only disseminating via international journals are well documented. Local in-country journals or local newsletters may be a better way to reach intermediate users. However, there are both advantages and disadvantages to publishing your own project or network newsletter.

**BOX 2: Examples of production of manuals****Ghana Pest Manual**

A manual was produced by the project Pests of Vegetables: Their Identification and Control in Ghana, comprising 282 pages with colour plates. This manual was expensive: it cost about £12 000 to produce, for an initial print-run of 500 copies, i.e. £24 per copy. It was printed in the UK. This figure does not include the cost of the authors time for researching, writing and taking the colour photographs himself. Most copies have been distributed free of charge, although about 100 have been sold for £10 each.

Recipients reportedly treasure their copies very highly. Demand in Ghana and beyond has been great but has unfortunately outstripped supply.

Source: B. Critchley, pers. comm., NRI.

**Agriculture in Forest Margins: booklets, manuals and technical guides, Bolivia**

Six publications were produced in collaboration with the International Center for Tropical Agriculture (CIAT) in Bolivia: three booklets on agroforestry crops, a manual and a technical guide on cover crops, and a book on participatory research methods. It took between 12 and 18 months to design, write and print the publications. Production was done locally in Santa Cruz. The project hand-delivered copies to all participating farmers. The publications are aimed at extensionists and farmers without advanced reading skills.

The booklets cost about US\$ 1 each to produce with a print run of 5000 copies, i.e. around £0.6 per copy. The book and manuals cost about US\$ 6 each with print runs of 500 copies, i.e. around £3.75 per copy.

Source: B. Pound, pers. comm., NRI.

**Pictorial extension manuals for women farmers in West Africa**

Working with women farmers in The Gambia, Rose Clarkson of the Edinburgh Centre for Tropical Forests, has developed a method to enable local fieldstaff to create visual agroforestry materials using only pictures. This pictorial approach avoids problems with local languages and dialects. Two manuals have been produced: one is a guide to tree management, the other gives information on producing the pictorial extension materials themselves.

250 copies of each manual were produced and disseminated for pilot testing. Reproduction was done by photocopy and cost approximately £4 per copy (45 pages, black and white, spiral bound). Distribution was free of charge to organizations in The Gambia and other routes of dissemination included individuals or organizations responding to articles, posters and flyers about the project.

The manuals were tested during a 9-month field trial. Clarkson says: "There appears to be a good deal of interest in the manuals. Around 80% of non-literate participants could understand the illustrations and use them effectively. I have tried to encourage critical reviews." Women users in The Gambia said: "The manual can help any Gambian woman farmer to do her work better. The use of neem tree to control pests and the [production of] mango jam and cashew nut pancakes are of great interest to us. With the help of this manual we can now plant trees by looking at the pictures step by step".

Phase II of the project (1999–2001) is testing and adapting the technique to suit the requirements of local development organizations in West Africa. This phase involves training of extension staff from agricultural and environmental organizations in The Gambia and Ghana to produce illustrated materials themselves for non-literate farmers.

Source: R. Clarkson, pers. comm., Edinburgh Centre for Tropical Forests.



### Advantages

- Newsletters are good for reaching intermediate users such as extension agents
- They can foster lively debate and exchange
- They can foster goodwill towards the project
- Simple formats are cheap to produce
- They can encourage cohesion between co-workers
- They provide an incentive for scientists to write-up project experience quickly
- They help attract and retain membership of a network
- They can attract a wide range of readers
- They are easy to photocopy and pass around
- They can be easily adapted for internet publication, thus reaching more readers

### Disadvantages

- Specialist newsletters may reach only a small audience
- They may be too sophisticated for end users (e.g. non-literates)
- They may be regarded as insufficiently rigorous by some scientists
- They can fall into the trap of targeting too many different groups

(With acknowledgements to Atalanta Christophers, NRInternational, and John Morton, NRI.)

### Costs for newsletters

Costs (June 1999 UK) for setting up a DTP system if a computer is already available are as follows:

- basic DTP software can be bought for as little as £50 (Power Publisher from GSP Software Ltd)
- Quark Xpress (top notch DTP software) costs about £700
- Photodraw 2000 (Microsoft graphics companion) costs about £100
- iGrafx Designer (specialized diagramming software for technical and creative graphics) costs around £260.

#### BOX 3: Use of newsletters

##### Podborer Management Newsletter

This newsletter is produced annually at NRI, Pest Management Department, UK by Derek Russell. It comprises six sides of A4 paper with a print run of about 200 copies. Production costs are virtually nothing since it is done in-house with DTP software. Printing and postage amounts to only £75 per issue.

Given that it has some impact, and even gets on to reference lists, it is certainly value for money.

Source: D. Russell, pers. comm., NRI

### (iii) Posters

(Adapted from Wilkinson, 1985.)

Posters should be large enough to attract attention and be seen and read from a distance. They should be based on a single idea expressed in a brief slogan (some recommend a maximum of seven words) and clear, culturally appropriate images – the meaning should be self evident. They can best be used for:

- creating awareness
- promoting action (they may persuade, warn, forbid, etc.) as part of a campaign advertising an event or product.

### Advantages

- Posters are good for giving simple, straightforward information
- They are good for reminding people of what has been taught

### Disadvantages

- They are not suitable on their own for teaching or explaining
- They do not have lasting impact, once people have got used to seeing a poster they stop noticing its contents

### BOX 4: Use of posters

#### Forest Margins posters, Bolivia

Two, full colour, posters were produced for publicity purposes in English and Spanish. They cost US \$ 1 each to produce with print run of 300 copies, i.e. around £0.65 each. Posters were designed by the projects local partner CIAT in Bolivia and printed locally.

They have been used extensively at all CIAT meetings and workshops and in the UK (e.g. Programme Advisory Committee (PAC) meetings, talks and conferences) and are a good talking point. They are effective in raising awareness about the existence and point of the project.

Source: B. Pound, pers. comm., NRI.

### Further reading on printed matter

BRADLEY, S.M. (1995) *How People Use Pictures: An Annotated Bibliography*. London: International Institute for Environment and Development. (Includes some notes on pictures and visual literacy.)

CLARKSON, R. (1996) *Agro-forestry Manuals for Women Farmers in West Africa. Part 2: The Design of Illustrated Manuals for Illiterate Women Farmers*. Edinburgh: Centre for Tropical Forests.

LINNEY, B. (1995) *Pictures, People and Power*. London: Macmillan. (Available from IT Bookshop, 103–105 Southampton Row, London WC1B 4HH, UK.)

WILKINSON, J. (1985) *A Guide to Basic Print Production*. London: British Council/Intermediate Technology Publications.

## RADIO

The reduced cost of buying and maintaining a radio and the increasing number of local and community radio stations means that it is now the most widespread of the mass-media. Radio can be used for a variety of purposes:

- to raise general awareness/entertain/inform
- to teach/train/encourage behaviour change
- to generate a discussion or a 'buzz' about a particular development issue

- to warn or mobilize quickly
- to persuade and encourage consumer uptake; radio can broadcast 'social marketing' advertisements
- to foster community development.

### Checklist

- Does a large proportion of your intended audience have access to and listen to radio (World Health Organization recommends at least 30–40% of target audience)?
- Do they trust/like the channel you propose to use?
- Are you confident of reaching your desired audience (i.e. can you control or specify schedules, language or dialect, appropriate formats to attract and maximize listener numbers)?
- Do you have time and money to pre-test your programmes on a (small) sample of your listeners?
- Can you afford to buy air-time (very few stations will give it free)?
- If not, can you attract commercial sponsorship?
- Does your information/message lend itself to an ephemeral, non-visual medium?
- Can you fulfil the entertainment expectations of your radio audience?
- Can your information/message be simplified for a non-specialist audience?
- Can you combine broadcast media with other media (e.g. posters, newsletters or text-books) to maximize impact?
- Do you have (access to) staff who are creative enough to translate your information into simple, memorable, imaginative and engaging programmes?
- Are you confident that you can respond to the new demands/queries generated by your radio programmes?
- Have you got time and money to monitor and evaluate your radio programmes?

### Advantages

- Radio reaches a large audience
- It can convey news or messages very quickly
- It can be particularly effective in rural areas and non-literate cultures
- It can also be effective for influencing decision-makers and local government
- It is a relatively simple and ubiquitous technology
- Radio programmes are relatively cheap to produce and cost-effective to broadcast
- Radio stations – of a community kind – are relatively cheap to set up
- Radio can attract a very loyal audience
- It can be listened to almost anywhere
- It encourages social gatherings and can promote discussion
- It can be interactive
- It stimulates the imagination
- It carries authority
- It is portable
- It does not require mains electricity

### Disadvantages

- Radio is ephemeral
- It is less memorable than visual media
- It can become background noise
- It is not suitable for imparting technical skills

## BOX5: Examples of use of radio

### Radio jingles about water hyacinth, Malawi

The control of water hyacinth project in the Shire River, Malawi has developed broadcast radio jingles to alert local fisherfolk to its activities. The messages contained in the jingles were devised with beach village committees, with the technical help of the Malawian Broadcasting Corporation. The messages, which were about how to stop the spread of the weed, were broadcast over 6 months, twice a week in three local languages.

Project staff have found that radio lends itself to raising awareness and can give basic guidance on action to be taken, but it is not so good for imparting technical information. Longer, more detailed programmes – even radio dramas – might be better for arguing the issues.

Source: G. Hill, pers. comm., CABI.

### Radio soap opera with a social conscience in Kenya

The Agricultural Information Centre (AIC) has been producing a radio soap opera in Kenya since 1995. Entitled *Tembea na Majira (Move with the Times)*, it is based on the everyday story of farming folk. Social, health and farming issues are all addressed (e.g. HIV/AIDS, alcoholism, women's work burden and crop pests).

Radio drama is a powerful means of communication. It is entertaining and relates to everyday issues that are of concern to the audience. It is able to raise farmers awareness; not through do's and don'ts but rather through presenting different sides of an issue, leaving the listeners to make up their own minds.

Helminth control in cattle is a current topic. The basic message is: the best way to keep your cows worm-free is not to dose them with anti-worm medicine, but to provide good shelter, plenty of clean drinking water, good nutrition and avoid grazing in marshy areas. This message was developed in association with KARI (Kenyan Agricultural Research Institute) and is woven into the soap opera plot through dramatic story-line development as well as through the characters' discussions with a fictional village animal health assistant.

The impact of this soap opera is remarkable. The numbers of adults listening regularly are estimated to be 6.5 million; this represented 55% of the sample interviewed in a listenership evaluation conducted in 1996.

Source: K. Lloyd Morgan, pers. comm., Mediae Trust.

- It normally requires human back-up
- It requires electricity/batteries (in most cases)
- Bad reception can put off listeners
- It requires skilled and experienced broadcasters/script-writers/producers
- It requires constant financial input
- It can be difficult to maintain editorial control
- It tends to reach more male listeners than women and children
- Radio may not always be trusted

### Costs for radio

In the Philippines, the cost of radio per thousand (people) is just US\$ 1.60 to US\$ 3.10. (i.e. £1 to £1.90). By comparison, the costs of other media are high: television US\$ 32.80 (£20.50), local print US\$ 86.70 (£54.20), cinema US\$ 53.80 (£33.60), and flyers US\$ 38.50 (£24.10) per thousand.

Because circumstances and prices vary enormously in a developing country context the following is a guide only. It costs (approximate 1999 prices in sterling) between £0.50 and £2 per minute on local community radio (figure based on Radio Surutu, Buena Vista, Bolivia and Radio Douentza, Mali, reaching approximately 125 000 listeners); about £15 per minute on local commercial radio (figure based on Radio Badenya, Sikasso, Mali, reaching approximately 300 000 listeners); about £66 per minute on national radio (figure based on Kenya national radio, KBC, reaching 6.5 million plus listeners).

To make a 15-minute radio programme (e.g. magazine or soap opera) costs £300 including staff-time, consumables, transport, programme monitoring and administrative costs. (This figure is based on the Kenya soap opera described in Box 5 and does not include studio time or equipment costs because KBC studios are used.)

To produce a 60-minute music cassette costs about £1500 to commission and record 10 local songs (assuming preferential rates are given by the local radio station for recording and editing facilities) (figure based on SCF Mali health cassettes).

### Further reading on radio

ADAM, G. and HARFORD, N. (1998) *Health On Air: A Guide to Creative Radio for Development*. London: Health Unlimited. (Health Unlimited, Prince Consort House, 27–29 Albert Embankment, London SE 7TS, Tel: 0171 582 5999.)

CBA/WILLIAMS, T. (1997) *Gender Equality: The Guide to Radio Training*. London: Commonwealth Broadcasting Association. (CBA is at BBC Yalding House, 152–156 Gt Portland St, London W1N 6AJ Tel: 0171 765 5144/5151.)

FOSSARD, E. de, (1997) *How to Write a Radio Social Drama for Social Development: A Script-writers Manual*. Baltimore: Johns Hopkins Centre for Communications Programs. (CCP is a School of Hygiene and Public Health, Johns Hopkins University, 11 Market Place – Suite 310, Baltimore, Maryland 21202-4012 USA.)

GIRARD, B. (ed.) (1992) *A Passion for Radio: Radio Waves and Community*. Montreal: Black Rose Books.

MYERS, M., ADAM, G. and LALANNE, L. (1995) *The Effective Use of Radio for Mitigation of Drought in the Sahel*. (Available from Mary Myers, 39 St Charles Square, London, W10 6EN.)

QUERRE, F. (1992) *A Thousand and One Worlds: A Rural Radio Handbook*. Rome: Food and Agriculture Organization of the United Nations. (Available free from Development Support Communication Branch, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy.)

### Websites

Mallard Radio: <http://www.mallard.org/index.html>

This site has technical and sales details of radio transmitting equipment suitable for developing countries, as well as attractive – though short – descriptions of some of the small radio stations that Mallard has helped to set-up over the years.

AMARC: <http://www.amarc.org>

This is the site of the World Association of Community Radio Broadcasters. It has news of members – mainly community radio stations in the developed and developing world – and of upcoming events and occasional references to interesting research or books on radio.

Radio Netherlands: <http://www.rnw.nl/realradio/community/index.html>

This is a useful site for updates in what is happening around the world in community radio – much of which is development-oriented.

## ON-LINE DELIVERY SYSTEMS

We cover three relatively distinct uses of the internet: (i) conferencing and newsgroups; (ii) publicity and promotion; and (iii) use of the World Wide Web (WWW).

### (i) Conferencing and newsgroups (attending a virtual meeting)

#### Advantages

- Internet conferences are cheaper to attend than live conferences
- Less time-consuming than travelling overseas
- More publicly accessible
- Can allow researchers to trial ideas
- Can promote distance education

#### Disadvantages

- On-line conferences may not be quality controlled
- No substitute for face-to-face contact (and less fun)
- Perceived as time-consuming
- Requires all participants to have up-to-date software

### (ii) Publicity and promotion

#### Checklist

- Do most of your regular/potential correspondents have fast and inexpensive internet access to e-mail ?
- Have you/your organization got the capacity to respond to the potential increase in correspondence/interest?
- Do most of your regular/potential correspondents have fast and inexpensive internet access to the WWW?
- Are there several well-known names and sites that you could make a link from, for example, from DFID's website, your university or research institute?
- Has your specialism got an obvious and unambiguous name which will enable access through a search engine?
- Have you got in-house technical expertise to maintain the website?
- Can you afford to buy-in expertise?

### (iii) The World Wide Web

#### Advantages

- Websites are effective in reaching a public/policy audience (e.g. developed country audiences)
- They can be cost-effective in terms of numbers reached
- Can help to establish dialogue by providing contact e-mails and addresses
- They can encourage professional networking
- They can expand the reach of published newsletters

#### Disadvantages

- Websites are inaccessible to most end users of natural resource research
- You do not know exactly who you are reaching
- Updating and technical maintenance can be expensive
- Over-elaborate websites are off-putting and slow to download
- There is a fear of unwanted or offensive correspondence (although most fears are unfounded)

A simple website is a single page normally consisting of:

- up to 250 words
- up to 10 links to other pages or external sites

#### BOX 6: Examples of use of web pages

##### Natural Resources Institute web-page ([www.nri.org](http://www.nri.org))

The NRI web-page is well-designed, user-friendly and fully searchable and is used by 100 to 150 virtual visitors per day. Resources are already available to NRI together with in-house computing skills. One full-time web administrator spends about 25% of her time on the external website (the remainder is used on the Intranet). There are additional inputs from a systems administrator, plus equipment and software maintenance costs. Material is available electronically.

The NRI expects to be able to set up a website on a mid-range server, connecting via JANET, with a 100-page site for about £12 000. This includes all equipment and staff-time. The total for maintaining the external site is about £15 000 annually. This does not include other NRI staff-time in preparing documents.

The website is cost-effective and will improve with the addition of interactive access to the NRI projects database. This will of course include many DFID-funded NR projects and will help to improve dissemination.

Source: A. Bourne, pers. comm., 1999.

##### Information for Development in the 21st Century (ID21): Research Summaries on the Web ([www.id21.org](http://www.id21.org))

ID21 is a collection of one-page (500-word) digests of current and recent development research studies, across 30 key social and economic development research fields.

The website is supported by a paper newsletter (*Insights*), occasional radio programmes (produced by PANOS), distributed to 1500 media outlets world-wide and can also be accessed by e-mail. It is hosted by the Institute of Development Studies (IDS), University of Sussex and is funded by DFID.

The site has 2500 visitors per week plus an active e-mail list of 3600 international subscribers to its electronic bulletin that goes out every 2–3 weeks. The cost is about £150 000 to maintain annually.

- about two clickable e-mail addresses
- a background image or colour
- registration with at least one search engine
- about six images such as logos, photographs, diagrams, etc.

(RSB Software Ltd: [www.rsbssoftware.demon.co.uk/prices.html](http://www.rsbssoftware.demon.co.uk/prices.html))

### Costs

**Costs of getting on-line** (approximate 1998 UK prices in sterling)

A complete internet-capable system (e.g. Pentium Personal Computer with internal modem and internet software) costs about £600–£1000. Complete systems on laptop computers cost about £1500 upwards. External modems cost from £50 upwards. Subscription to an internet service provider costs about £10 monthly plus the cost of local line rental and telephone calls, depending on use.

### Costs of websites

Websites cost anything from £100 to £20 000 to set up and maintain. Costs start at about £50 per page for a simple website design, then one-off costs for hosting the site are about £40, plus the monthly subscription to the server (about £10 per month). Getting an outside company to maintain your site might cost about £40 per hour, or a flat rate of about £50 per month.

### Further reading on websites

PANOS INSTITUTE (1998) *The internet and poverty. Panos Briefing, No. 28.* London: Panos Institute. ([www.oneworld.org/panos/](http://www.oneworld.org/panos/))

RICHARDSON, D. (1997) *The Internet and Rural and Agricultural Development: An Integrated Approach.* Rome: Food and Agriculture Organization of the United Nations. (Author can be contacted at the University of Guelph, Canada or through the devmedia website: [www.devmedia.org](http://www.devmedia.org))

STICHELE, P. VAN DER and BIE, S.W. (1997) *The Last Mile: How Can Farmers Take Advantage of New Media?* Rome: Food and Agriculture Organization of the United Nations.

Website: [www.cgiar.org:80/ivdn](http://www.cgiar.org:80/ivdn) – the CGIAR's website about the Integrated Voice and Data Network.

### VIDEO

Video technology can be used for a number of basic purposes in development work. It can be used to make standard documentary or promotional features, produced in a development context, and also for playback of pre-recorded tapes as part of an educational, training or development process. Further uses are to research and gather information, to make and store records, to monitor and evaluate activities, and finally as a participatory tool for group development in which video is used to bring people together, stimulate discussion and expression and develop communication within and between groups (Shaw and Robinson, 1997).



### Checklist

- If you cannot have local access to equipment can you afford the relatively high initial investment?
- Have you got access to scripting, camera and editing skills?
- Are you sure your intended audiences will not be more than 50 per showing?
- Is your chosen film format compatible with your target country's system?
- Can you supplement your video with human back-up to answer questions/guide discussion?

### Advantages

- Ease of operation: it only takes a few weeks to learn to manipulate editing equipment and just a few hours to use a camera
- Video can help to overcome literacy barriers
- Anything recorded can be played-back immediately without the need for processing
- Can compress time (e.g. yearly life cycle of plants can be shown in a few minutes)
- Can bring other realities (e.g. showing how something has been done in another community)
- Video equipment is relatively easily transportable
- Tapes are easily copied
- Cameras can be run on batteries
- Good for promoting discussion
- Good for recording

### Disadvantages

- Spare parts and skills to maintain equipment may not be readily available
- A stable electricity supply is necessary for showing videos
- Although it is easy to learn to use modern video equipment, high levels of skills will be needed to make videos which are usable beyond the immediate group, particularly if they are to be used for training, reporting or promotion
- Although the costs of equipment are decreasing all the time, video is still expensive when compared to folk media, for example
- Many communities do not have play-back facilities and the advantages of immediacy and being able to see things many times are lost
- Skilled facilitators may be needed if a good discussion is to result from video viewing
- As it is too easy to record everything it can result in 'dead' tapes that no-one looks at or the need for very extensive and, therefore, expensive editing

### Costs for video including digital systems

#### Video

Total costs are around £2000 (1999 prices).

Video expertise and equipment can usually be bought in locally, but some projects might want to provide equipment to collaborators or intermediaries as part of capacity building, or have video as part of their project communication equipment. If a project is considering buying capital equipment and making its own videos, the following indicative costs will be helpful. They assume basic quality – better than

### BOX 7: Examples of use of video

#### Videos on Agriculture in Forest Margins, Bolivia

The project produced two videos in 1998 aimed at farmer groups and extensionists (particularly NGO extension staff) on *The Use of Peach Palm* and *The Association of Citrus, Annual Crops and Leguminous Cover*. Each was 20 minutes long, and cost US\$ 6000 (£3750) to produce. They were filmed by CIAT Bolivia during the course of a year, in order to cover the whole crop sequence. CIAT has made about 100 copies and is distributing them at a small cost to projects and NGOs in Bolivia.

Source: B. Pound, pers. comm., NRI.

#### Three videos on tropical multipurpose trees

The project produced three educational videos on tropical multipurpose trees: *Leucaena*, *Calliandra* and *Gliciridia*. Each tape covered the exploration, collection and evaluation of germplasm of the trees. The video cassettes were widely distributed in 57 countries to NGOs, NARS, private companies, individuals and academic institutions. Enthusiastic feedback was received from academic users and trainers, although they did not meet the needs of some extension agents who expected a 'how to' guide. The cost of producing the *Leucaena* video in 1995 (a series of colour stills, not moving pictures) was £7000. The duration of the video is 18 minutes.

The project leader is currently (1999) commissioning a new video about *Gliciridia*. The budget is £30 000 for the production of three different videos. One is aimed at donors, one at NGOs, and one short extract for insertion into television news as a feature. It also includes provision for distribution and marketing. The target audience is donors, scientific institutes and NGOs in the field.

Source: A. Pottinger, pers. comm., Green College, Oxford.

home video but not as good as broadcast quality. (These estimates do not cover technical training.)

Recording costs include the following: a S-VHS or Hi-8 camcorder, tripod and microphones (middle range) cost about £1500, with rechargeable batteries at about £50 each; tapes cost about £5–8 each.

Editing cost options include: VCR (Video Cassette Recorder) (use two VCRs to edit tapes) about £300 each, or a basic edit station at about £200, or hire of local editing facilities (e.g. local TV station) where rates vary. Playing costs for VCR (as above) are about £300, a television monitor cost about £100. The electricity source can be, for example, a car battery.

#### Digital systems

Total costs are around £5000 (1999 prices).

Digital technology now allows video to remain in a format which is more flexible and does not degrade. Digital cameras are lightweight and will give a better quality picture than ordinary camcorders. The editing process – once learned – is much quicker. However, costs are higher and repairing and maintaining the equipment in developing countries are a problem.

The following is a guide to prices: digital recording costs for a digital camera, tripod and microphone start at about £1500, a battery pack costs about £150, and digital video tapes about £10 each.

Digital editing cost options include a full computer-based editing package including a personal computer with a video card at about £2500 or a digital video card alone at about £200 (minimum requirement is a Pentium PC). An alternative is provided by portable editing suites at about £25 000, plus VHS tapes for downloading at about £2 each. Playing costs for VCR (as above) are about £300, plus a TV monitor at about £100 and an electricity source (e.g. car battery).

To produce a video film professionally, by hiring a specialist team, costs about £4000–15 000 per 15 minutes of film.

### **Further reading on video**

SHAW, J. and ROBINSON, C. (1997) *Participatory Video: A Practical Guide to Using Video Creatively in Group Development Work*. London: Routledge. (ISBN 0-415-14105)

BRADEN, S. with HUONG, T. (1998) *Video for Development. A Casebook from Vietnam*. Oxford: OXFAM. (ISBN 0-855-983701)

MILLERSON, G. (1992) *Video Production Handbook*. Focal Press. (ISBN 0240513215)

### **Websites**

[www.tao.ca/videazimut/index.html](http://www.tao.ca/videazimut/index.html)

Videazimut: an international non-governmental coalition promoting audio-visual communication for development and democracy.

[www.videonetwork.org](http://www.videonetwork.org)

Contact Video Network gives practical tips on video production and using video as an activist tool.