Day Three

Review Session

Session 11
Negotiation in the ABS Process

Session 12
Protection and Documentation of Traditional Knowledge

Session 13
Review of Sample Formats for Traditional Knowledge Documentation

Session 14
Process of Traditional Knowledge Documentation

Session 15
Community Selection, Group Formation and Field Assignments

Review Session

Time: 30 minutes

Objectives

To review the participants' perceptions of the previous day's session.

- To find out what participants learned from the previous day
- To give participants an opportunity to ask questions and for the trainer to provide clarification
- To get feedback on the training and session theme
- To discover any pressing issues

Materials

Flipchart, markers, tape, and board

Method

Participatory discussion

Suggested Questions

- What did you learn from yesterday's session?
- Is any clarification needed?
- Did the methodology used help you to engage in the session?
- Do you have any other suggestions?

It is not necessary that only these questions be asked. If other questions arise, the trainer should record the question and politely promise that the feedback will be considered. The trainer should not spend too much time on each question during the review session, keeping the time and purpose of the session in mind.

Suggestions for the trainer

If appropriate, start the day with an energiser exercise; one of your own or one suggested by the participants. In any case, have an exercise ready in case the participants do not come up with one. Start the review session after the energiser.

Attach a flipchart to the board and record the feedback from participants. Ask participants their perceptions of the previous day's sessions.

Then move to the first session of the day

Session 11
Negotiation in the ABS Process

Time: 2 hours

Objectives

To review the negotiation process for ABS.

- To be acquainted with the principles of negotiation in the ABS negotiation process
- To understand negotiation issues in ABS bioprospecting
- To be aware of negotiation elements in the ABS process
- To be aware of important guidelines and key areas of consideration in the negotiation process

Methodology

Group exercise and presentations. The person who presents the session can choose to make verbal presentations, use a media tool such as PowerPoint, or come up with his/her own innovative methodology. If a media presentation is chosen, prepare it in advance and set up the equipment before the session starts.

Suggestions for the trainer

Link the session to the previous day's session on the ABS legal process. This session should be dedicated to reviewing negotiation in the ABS bioprospecting process. Start by defining negotiation and identifying the negotiating parties in the ABS process, and follow with a discussion of some general principles of negotiation. You can supplement this with a negotiation exercise chosen to reflect the theme of the session. The exercise should lead into a discussion of the theme which will give you an opportunity to clarify anything that isn't clear. Refer to the outcome of the previous day's role play to start the discussion. Discuss the components of ABS in detail while referring to the resource material, and preferably refer to the PIC and MTA tools simultaneously. Mention to the participants that the resource materials for the session are provided in the manual.

Attention!

This session is purely technical and the trainer should have an in depth knowledge of the content. If the trainer is not fully equipped to deal with the content, a resource person(s) can be invited to conduct the session.

Do participants need an energiser?

Activities

Activity 1: Presentation on negotiation in the ABS process.

The presentation should cover the principles of negotiation and negotiating partners in the ABS process.

Activity 2: Exercise – Negotiation role play

Time: 30 minutes

Aim

To help participants understand the principles of negotiation through role play.

- Participants learn the principles of negotiation.
- Participants understand the elements of negotiation in the ABS process.
- Participants are able to understand the power, obligations, rights, roles, and responsibilities of the various actors in the ABS process.

Method

Group exercise, role play on a case

Materials

Flipchart, markers, tape, board

Steps

Step 1 Split the participants into four groups by allocating a number from one to four.
Step 2 Introduce the aim of the exercise.
Step 3 Allocate each group a role:
- First group: Government project representatives
- Second group: Ward 1 community representatives
- Third group: Ward 2 community representatives
- Fourth group: Audience

Step 4 Distribute the case to the groups and explain it to them.
Step 5 Each group should be briefed on the role that they will be playing during the exercise.

Step 6 Ask the groups to refer to the case for their role.
Step 7 Mentor each group on their role and functions.
Step 8 Give the groups at least 5 minutes to prepare before the role play.
Step 9 When all the groups are ready, start the exercise.
Step 10 The trainer and audience groups should carefully observe the role play.
Step 11 After the role play is finished, open the floor for discussion, using a flipchart to record the outcome.

Negotiation practice case

A wetland area (Maipokhari Sacred Lake in Nepal) is rich in biodiversity and genetic resources. A company has offered to the government to use some of the resources and thus generate income which it will share with the government and the community in the ward where the wetland is located.

There is a conflict between the communities in Ward 1 and Ward 2 over ownership of the wetland, as both say that it falls within their ward. The government representatives decide to visit the wetland area and arrange a meeting with the Ward 1 and Ward 2 communities and the bioprospecting party to brief the communities about the project and to initiate a discussion on the utilisation of resources and sharing of benefits. The meeting between the groups takes place and all three groups negotiate.

Activity 3: Discussion and Presentation on details of negotiation in the ABS process.

The outcome of the role play should be used by the trainer to explain in detail the power, principles, roles and responsibilities, and obligations in the negotiation process. This can be done through a media presentation or by referring to the role play at the same time as discussing the role play outcome. The discussion should be continued until it is time to move to the next session.

Session 11 Resource Materials

Negotiation in the Access and Benefit Sharing Process

Definition of negotiation

Negotiation is a problem solving process in which two or more people or parties voluntarily discuss their differences and attempt to reach a joint decision on their common concerns. It is one of the most common approaches used to make decisions and manage disputes in natural resources management.

Negotiation occurs between spouses, parents and children, managers and staff, employers and employees, professionals and clients, within and between organisations, and between agencies and the public. It requires negotiating parties to identify issues about which they differ, educate each other about their needs and interests, generate possible settlement options, and bargain over the terms of the final agreement. Successful negotiations generally result in some kind of exchange or promise being made by the negotiators to each other. The exchange may be tangible, such as money, a commitment of time, or a particular behaviour, or intangible, such as capacity development or an agreement to change an attitude, expectation, or to make an apology.

Quite simply, negotiation is an interaction of influences. Such interactions, for example, include the process of resolving disputes, agreeing upon courses of action, bargaining for individual or collective advantage, or crafting outcomes to satisfy various interests. Negotiation involves two basic elements: the process and the substance. The process refers to how the parties negotiate: the context of the negotiations, the parties to the negotiations, the relationships between the parties, the communication between the parties, the tactics used by the parties, and the sequence and stages in which all of these play out. The substance refers to what the parties negotiate over: the agenda, the issues, the options, and the agreement(s) reached at the end (Wikipedia no date).

Negotiating parties

In the realm of ABS, the negotiating parties are known as the contracting parties (i.e., the accessing and providing parties).

Accessing party: Section 3(1) and 3(2) of the Indian Biodiversity Act defines the accessing party as any person (including foreigners, non-resident Indians, and foreign companies) who intends to obtain any biological resources or knowledge associated occurring in a provider country for research or for commercial utilisation or for bio-survey and bio-utilisation or to transfer the results of any research relating to biological resources or associated traditional knowledge, and requires them to obtain prior approval from the National Biodiversity Authority.

Providing party: The providing party is the contracting party (provider country) to the CBD that provides access to resources and knowledge/technology situated in their country to users (accessing parties). The providing party can also be the accessing party.

Principles of negotiation

Most negotiations are oriented towards positions. The predetermined outcome that is perceived by disputants as satisfying their needs and objectives is what we term their position. The bottom line or final position represents the minimum acceptable solution to the disputant. The other disputant sees resolution of the issue from the opposite point of view. If the range of these positions overlap, it may be possible for parties to find a solution that satisfies both. However, usually, the parties' positions are so distant and their views of the problem so mutually exclusive that the only possibility for a solution is for at least one party to compromise. Until concessions are made by one or both parties, the positions of the parties will continue. Compromise is the measure by which each is prepared to concede its own needs in order to obtain a settlement. A solution based on mutual compromise is, therefore, less than optimal for both disputants. Where no compromise is reached, the parties will not negotiate a mutually satisfactory solution. This is the limit of position-based negotiation.

The alternative to this kind of approach to negotiation is interest-based bargaining using a third-party as negotiator. A principle negotiator tries to focus the disputants on a settlement that will meet as many of their mutual and complementary interests as possible. The final position of the disputants shrinks in importance while meeting the interests of each disputant is magnified. In this cooperative negotiation strategy, the parties are more focused on the matter at issue between them and less on the people involved. They try to be inventive and to base their evaluation of possible settlement options on the objective criteria agreed between them.

Interest-based negotiation is the most suitable approach for agreements related to access and benefit sharing from genetic resources and associated traditional knowledge. In interest-based negotiation, both the accessing and provider parties sign an accord agreeing the terms and conditions. The terms of the agreement between the parties (providers and accessing) at the government/community level will be developed between the parties with inputs from the biodiversity authority, board, or committee. In the negotiation, the following points must be remembered:

- Focus on interests, rather than positions
- Separate the people from the problem
- Find (creative) options for mutual gain
- Use fair criteria (which includes proposing and pursuing fair benefit shares)

In the context of ABS, negotiation is an important part of the process and is required at each step, beginning from access right through to when benefit sharing occurs. Parties responsible for providing the access should base their negotiation on mutually agreed terms (MAT) and prior informed consent (PIC), and as stipulated by law.

Conditions for successful negotiation

A variety of conditions can affect the success or failure of negotiations. The following conditions make success in negotiation more likely.

Identifiable parties willing to participate

In the bioprospecting process, several parties are involved for different purposes. If it is for research on genetic resources and associated traditional knowledge, the research institution, researchers, and the indigenous local community where the research is to be undertaken will be the parties. Similarly, if the project is for the commercialisation of genetic resources, multiple parties are involved: the national biodiversity authority, state biodiversity authorities, biodiversity management committees, the indigenous/local communities where the bioprospecting is taking place, and the bioprospecting or accessing party. All those who have a stake in the negotiations should be identified and willing to sit together at a bargaining table if a productive negotiation is to occur. If a critical party is absent or not willing to participate, the potential for agreement declines. For example, in relation to bioprospecting, if the local/indigenous people are absent during negotiations for the sharing of benefits, the negotiation will not be effective.

Interdependence

For productive negotiation to occur, the parties must be dependent upon each other to have their needs met and interests satisfied. The participants either need each other's goodwill or at least a lack of negative action for their interests to be satisfied. If one party can get their needs met without the cooperation of the other, there will be little impetus to negotiate.

Readiness to negotiate

The parties must be ready to negotiate for dialogue to begin. For example, a US based pharmaceutical company is willing to develop a vaccine from the serum of Himalayan ibex in Khunzarab National Park in Pakistan. The government authority gave permission to take the blood sample from the Himalayan ibex in the Park, but the local community was not informed and had no idea of what was happening to the resources that they had conserved for so long. In such a situation, the provider (i.e., the government) and the accessing party (the pharmaceutical company) should be ready to negotiate with the local community to come up with an agreement on the process and activities that would occur, and on the benefit sharing arrangements between the providing parties (i.e., the government/local community) and the accessing party (i.e., the pharmaceutical company).

Influence or leverage

For parties to reach agreement over issues about which they disagree, they must have some influence over the attitudes and/or behaviour of the other negotiator. Influence is often perceived as a negative or underhanded use of power to pressure one party into making an agreement that is beneficial to only that party. However, here we are talking about influence as a way of encouraging change. Asking provoking questions, providing answers, seeking the advice of experts, appealing to influential associates of a party, exercising legitimate authority, or providing rewards, are all ways of exerting influence during negotiations.

Agreement on the issues and a vested interest

People must be able to agree upon some common issues and interests for progress to be made in negotiations. In general, participants will have some issues and interests in common and others that are of concern to only one party. The number and importance of the common issues and interests influences whether or not negotiation starts at all and whether or not it terminates in agreement. Parties must have enough issues and interests in common to commit themselves to a common decision-making process.

Willingness to settle

Both the parties should be willing to settle any dispute that may occur when bioprospecting takes place. The accessing party should clearly explain its position, the expected outcome, and the exact percentage and type of benefit that the community and the government will receive from the bioprospecting. If there is a dispute, both parties should agree to settle it amicably or by use of a third party.

A sense of deadline and urgency

Negotiation generally occurs when there is some pressure or urgency to reach a decision. Urgency may be imposed either by external or internal time constraints or potential positive or negative consequences if settlement is or is not reached. External constraints include court dates, imminent executive or administrative decisions, or predictable change in the environment. Internal constraints may be artificial deadlines selected by the negotiator to enhance the motivation of another to settle. For successful negotiation, the parties must jointly feel a sense of urgency and be aware that they are vulnerable to adverse action or loss of benefits if a timely decision is not reached.

Issues must be negotiable

The negotiators must believe that there are acceptable settlement options open to them as a result of participating in the process. If negotiation appears to have only win/lose possibilities, the parties will be reluctant and have little reason to enter into the dialogue.

Willingness to compromise

Not all negotiations require compromise. Often agreements in bioprospecting can be reached that meet all the parties' needs and do not require compromise by any party. Where the physical division of assets, strong values, or principles preclude compromise, negotiation is not possible. For example, if a product or process goes against the ideals of the local community, negotiation is not possible.

The agreement must be reasonable and implementable

There is no point coming to an agreement in substance, if it cannot be implemented. Thus the parties must be able to establish realistic and workable plans to carry out their agreements that will hold over time.

Resources to negotiate

Parties in negotiations must have the interpersonal skills necessary for bargaining and, where appropriate, the money and time to engage fully in procedures and dialogue. Inadequate and unequal resources may block the initiation of negotiations or hinder settlement. A number of stages must be followed to make negotiation meaningful. These stages include: the introduction and establishment of expectations, discussion and definition of issues, identification of interests, and generating options and solutions.

Steps and Procedures in ABS Negotiation

Prior informed consent: Article 15(5)

Parties seeking access to genetic resources and associated traditional knowledge are required to submit an application for PIC and obtain a written permit from the competent national authority of the provider country. In the process, legislation may require the accessing party to obtain prior informed consent from certain stakeholders (e.g., the community from where the genetic resources and associated traditional knowledge will be accessed). This means that the competent authority, community, or biological resources and knowledge holders should be fully informed about the purpose and objectives, both long and short term, of access and the subsequent benefit sharing arrangement proposed by the accessing parties. The competent authority will have the legal power to grant PIC, but, if deemed necessary, may delegate this power to another entity. The information requirements for PIC are given in Box 1.

Box 1: Information requirements for PIC

Under the Bonn Guidelines, for PIC to be obtained, the following must be disclosed to the providing party:

a. Legal entity and affiliation of the applicant and/or collector, and contact person if the applicant is an institution
b. Type and quantity of genetic resources to which access is sought
c. Starting date and duration of accessing activity
d. Geographic prospecting area
e. Evaluation of how the access activity may impact on conservation and the sustainable use of biodiversity, to determine the relative costs and benefits of granting access
f. Accurate information regarding intended use (e.g., taxonomy, collection, research, commercialisation)
g. Where the research and development will take place
h. Information on how the research and development is to be carried out
i. Identification of local bodies for collaboration in research and development
j. Possible third party involvement
k. Purpose of the collection, research, and expected results
l. Kinds/types of benefits from utilisation of the genetic resource
m. Indication of benefit-sharing arrangements
n. Budget
o. Treatment of confidential information.

Source: CBD 2002b

Why PIC?

PIC helps the genetic resources and traditional knowledge holders and providers, users, and accessing parties involved in the agreement to take informed decisions related to bioprospecting on necessary administrative, legal, and ethical matters and to negotiate fair and equitable benefit sharing, including the sharing of tangible and intangible benefits, ensuring transparency and accountability in the process. PIC also minimises the cases of biopiracy.

Key Elements of PIC

The PIC agreement may include the following.

Approval of PIC application by competent authority or evidence of PIC

Subject to the national legislation of the providing country, the user parties should obtain PIC from the competent authority of that country and relevant stakeholders. The national legislation and customary laws/practices should be taken into consideration before obtaining the approval of local and indigenous communities to access their genetic resources, traditional knowledge, innovations, and practices. Sample PIC application forms developed by the Royal Government of Bhutan and Government of India are provided in the Resource Materials for Session 10.

Timing of application

The PIC application to the provider country should be made when the potential bioprospecting parties have primary knowledge of genetic resources and traditional knowledge that they wish to access from a certain country or geographical area and from a specific community. PIC should be sought in advance to facilitate the application process and so that a meaningful consultation and decision process can take place between the provider and user parties. The time for response to an application for PIC should be specified in the providing country legislation.

Use of accessed resources

The purpose, objective, and use of genetic resources or associated traditional knowledge for which the consent is sought should be clearly spelt out in the PIC application. If there are any changes in the use of the resources and knowledge during the agreed time period for which access has been granted, the user should seek further prior informed consent. This should be mentioned in the terms and conditions of the agreement between the provider and user parties. However, this requirement is subject to each country's ABS legislation.

PIC procedures

Access can be obtained through an application process, subject to the national legislation of the provider country. The degree of information needed by the competent authority may vary based on the bioprospector's purpose and the stakeholders involved. In relation to research, the Swiss Academy of Sciences has identified four cases where PIC is required:

No ABS situation: The research does not involve any access situation or genetic resources. Thus, no ABS contract is necessary. However, other research permits may be required.

Simple ABS situation: The research involves the collection and transfer (including export) of samples for an inventory. A (standard) Material Transfer Agreement (MTA) is sufficient.

ABS situation: The export of samples is required for further analysis and study in a laboratory within the country or abroad. No further exploitation is planned. A simple ABS contract is sufficient.

Complex ABS situation: The proposed research involves various steps, including possible research for commercial purposes or the use of traditional knowledge. A full ABS contract is required.

Regarding the information requirements in the PIC application, the Bonn Guidelines have made suggestions, which have been adopted by most countries in the Himalayan region. The application for access and the decision by the competent authority to grant (or deny) access must be documented in written form. All documents, access, and licences/permits should be recorded. During the process, transparency and accountability of both sides (access seekers and providers) must be ensured. PIC is normally obtained from the biodiversity authorities at the national, provincial, and local levels. However, problems may arise when the potential prospectors go to the area where the resources and knowledge are located. At this stage, the knowledge holders may disagree on the consent and conflict may arise. In order to avoid this situation, it is advised that PIC also be obtained from the community located in the area where the bioprospecting activity is proposed. While obtaining PIC it must be remembered to respond to a blend of different moral rules in addition to the ABS procedure. This will prevent potential obstacles. It may help to prepare by answering a series of questions on 'who' and 'whose' in relation to planning and disclosure (see Table 6). This will help accessing parties to prepare to obtain PIC from the concerned stakeholders in the local community.

Table 6: Key questions for consideration during the PIC process

STEP 1 Preliminary Planning	STEP 2 Detailed Planning	STEP 3 Disclosure	STEP 4 Outcome
• Who will take part in the PIC process? • Who participates in whose PIC? • Who is left out in the PIC? • Who identifies problems in the area? • Whose problems? • Whose questions? • Whose bioprospecting? • Whose concerns are left out?	• Who is influential? • What is the power game? • Who makes the decisions in the community on what is important for the community? • Who should decide? • Who controls the information? • Who is the knowledge holder? • Who in the community is marginalised? **Reality check and understanding** • Whose knowledge and resources? • Who is speaking the truth? • Who is informed and who is not in the proposed bioprospecting? • Who understands the output of prospecting and who does not? • Whose reality is left out?	• Who owns the output of the bioprospecting? • Who owns the data from the research and development? • Who has access to the developed knowledge and products and why? • Who uses this and for what? • Who cannot access and use them?	• What happens in the planned activity? • Who benefits? At whose cost? • Who gains and who loses? • Whose capacity is enhanced? • Who is empowered and who is disempowered due to bioprospecting?

Mechanisms for consultation of relevant stakeholders

Considering the PIC application and subject to statutory and customary laws, the provider country may facilitate the consultation process with relevant stakeholders involving local and indigenous communities and may discuss in detail access activities and benefit sharing arrangements. However, subject to the national legislation of each country, the PIC of the community should also be obtained. In such cases, the national standard PIC form may be modified as needed to seek consent from the community concerned.

CBD PIC responsibilities

In many countries in the Himalayan region, bureaucratic governance and lack of transparency can be the key obstacles in the process, despite legal provisions providing for the right to information. Therefore, it is suggested that the user parties carefully follow the responsibilities set out in the Bonn Guidelines (Box 2). By following the Bonn Guidelines, the parties can ensure accountability and transparency and help communities and traditional knowledge holders to take part in the negotiation process, as well as increasing their effectiveness.

Box 2: CBD Bonn Guidelines: PIC user responsibilities

Under the Bonn Guidelines, users of genetic resources and associated traditional knowledge should:

- be encouraged to review their policy, administrative, and legislative measures to ensure they are fully complying with Article 15 of the CBD;
- be encouraged to report on access applications through the Clearinghouse mechanism and other reporting channels of the Convention;
- seek to ensure that the commercialisation and any other use of genetic resources will not prevent the traditional use of genetic resources;
- ensure that they fulfill their roles and responsibilities in a clear, objective, and transparent manner;
- ensure that all stakeholders take into consideration the environmental consequences of the access activities;
- establish mechanisms to ensure that their decisions are made available to relevant indigenous and local communities and relevant stakeholders, particularly indigenous and local communities;
- support measures, as appropriate, to enhance indigenous and local communities' capacity to represent their interests fully at negotiations.

Source: CBD 2002b

Mutually agreed terms (MAT)

Article 15(4) of the CBD stipulates that access should be based on mutually agreed terms (MAT) between both parties. The same basic principles used in PIC are used in developing MAT, but in the case of MAT the focus is on the terms and conditions set while reaching the agreement and signing the contract for bioprospecting. Such a contract is legally binding in the ABS process and ensures transparency and accountability on both sides. After the agreement is reached and terms and conditions are satisfied between the parties, a material transfer agreement (MTA) can be made. The responsibilities related to MAT suggested by the Bonn Guidelines are summarised in Box 3.

Box 3: CBD Bonn Guidelines: MAT user responsibilities

Under the Bonn Guidelines, users of genetic resources and associated traditional knowledge should:

- seek PIC in conformity with Article 15, paragraph 5, of the CBD;
- respect customs, traditions, values, and customary practices of indigenous and local communities;
- respond to requests for information from indigenous and local communities;
- only use genetic resources for purposes consistent with the terms and conditions under which they were acquired;
- ensure that uses of genetic resources for purposes other than those for which they were acquired only take place after new prior informed consent and mutually agreed terms are given;
- as much as possible, endeavour to carry out the use of the genetic resources in, and with the participation of, the providing country;
- establish special terms and conditions under mutually agreed terms to facilitate taxonomic research for non-commercial purposes;
- ensure the fair and equitable sharing of benefits, including technology transfer arising from the commercialisation or other use of genetic resources, in conformity with the mutually agreed terms established with the indigenous and local communities or stakeholders involved.

Source: CBD 2002b

Elements of MAT

While developing the MAT, some fundamental elements must be considered. These include the following:

- Legal certainty and clarity
- Minimisation of transaction costs
- Inclusion of provisions on user and provider obligations
- Development of different contractual arrangements for different resources and for different uses, and development of model agreements; different uses may include, among other things, taxonomy, collection, research, and commercialisation

- Mutually agreed terms should be negotiated efficiently and within a reasonable period of time
- Mutually agreed terms should be set out in a written agreement

In the written MATs, it is necessary to indicate information pertaining to the critical elements given in Box 4.

Box 4: Elements that should be included in the MAT

Under the Bonn Guidelines, the following should be included in the mutually agreed terms:

- Type and quantity of genetic resources, and the geographical/ecological area of activity
- Any limitations on the possible use of the material accessed
- Capacity-building in various areas to be identified in the agreement
- A clause on whether the terms of the agreement can be renegotiated in certain circumstances (e.g., change of use)
- Recognition of the sovereign rights of the country of origin
- Whether or not genetic resources can be transferred to third parties without ensuring that they enter into a similar agreement (except for taxonomic and systematic research that is not related to commercialisation)
- Protection and promotion of innovations and practices of indigenous and local communities and promotion of customary use of biological resources in accordance with traditional practices
- Treatment of confidential information
- Provisions regarding the sharing of benefits arising from the commercial and other use of genetic resources and their derivatives and products

Source: CBD 2002b

In addition to the above, there are some other guiding parameters suggested in the Bonn Guidelines that may be necessary for MAT.

- Take into account the ethical concerns of the particular parties and stakeholders, in particular the indigenous and local communities concerned.
- Provisions to ensure the continued customary use of genetic resources and related knowledge
- Provision for the use of intellectual property rights including joint research, and an obligation to implement rights on inventions obtained and to provide licences by common consent
- The possibility of joint ownership of intellectual property rights according to the degree of contribution

Material transfer agreement (MTA)

Material transfer agreements (MTAs) are contracts used for the transfer of genetic materials and which contain the terms and conditions on which the material is transferred. MTAs may take various forms, ranging from a short shipment document, delivery notice, or standard invoice containing minimal conditions, to a fully-fledged, negotiated, and signed contract containing mutually agreed terms. The important things to consider while executing an MTA are shown in Box 5.

Box 5: MTA – Things to keep in mind

Material transfer agreements (MTAs) may vary depending on

- the specific purpose of an applicant seeking access to genetic resources and traditional knowledge from another contracting party;
- the administrative, legal, and policy frameworks on ABS, as well as the scientific and technological capabilities of the parties to facilitate a fair and transparent ABS deal;
- the mutual concerns of the parties in relation to the conservation of biodiversity and equitable sharing of all kinds of benefits arising from the sustainable use of the resources and associated traditional knowledge, data, and information accessed.

MTA provisions

The CBD Bonn Guidelines provide a framework for developing MTAs with elements that may include introductory provisions, ABS provisions, and legal provisions.

Introductory provisions

- A preamble with a reference to the Convention on Biological Diversity
- The legal status of the provider and user of genetic resources
- The mandate/objectives of the provider and, where appropriate, the user of genetic resources

Access and benefit-sharing provisions

- A description of the genetic resources covered by the MTA, including accompanying information
- The permitted uses of the genetic resources, their products or derivatives under the MTA
- A statement on any change of use that would require new PIC and a new MTA
- A statement as to whether or not IPR is sought and, if so, under what conditions
- The terms of benefit-sharing arrangements specifying the type/kind of benefits to be shared
- A clause on non-warranties guaranteed by the provider on the identity and/or quality of the provided material
- A statement on whether or not the genetic resources and/or accompanying information may be transferred to third parties and, if so, the conditions under which such a transfer is permitted
- Definitions of various terms to avoid ambiguity
- A duty to minimise the environmental impacts of collecting activities

Legal provisions

- An obligation to comply with the material transfer agreement
- The duration of the agreement
- Notice required to terminate the agreement
- The fact that the obligations in certain clauses survive the termination of the agreement
- The independent enforceability of individual clauses in the agreement
- Events limiting the liability of either party (such as events beyond human control, calamities)
- Dispute settlement arrangements
- Assignment or transfer of rights

- Assignment, transfer, or exclusion of the right to claim any property rights, including IPR, over the genetic resources received through the material transfer agreement
- Choice of law under which the agreement will be governed (if contracting between two countries)
- Confidentiality clause

Benefit sharing

Benefit sharing refers to the forms of compensation given to the genetic resources and traditional knowledge provider parties by the user parties according to the contract agreement signed in the bioprospecting plan. These compensation forms are provided in the legislation of individual countries. The CBD suggests the kind of monetary or non-monetary benefits that may be used.

Monetary benefits may include, but are not limited to, the following:

- Access fees or a fee per sample collected or otherwise acquired
- Up-front payments
- Milestone payments
- Payment of royalties
- Licence fees in the case of commercialisation
- Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity
- Salaries and preferential terms where mutually agreed
- Research funding
- Joint ventures
- Joint ownership of relevant intellectual property rights

Non-monetary benefits may include, but are not limited to the following:

- Sharing of research and development results
- Collaboration, cooperation and contribution in scientific research and development programmes, particularly biotechnological research activities, where possible in the provider country
- Participation in product development
- Collaboration, cooperation, and contribution in education and training
- Admittance to ex situ facilities of genetic resources and to databases
- Transfer to the provider of the genetic resources of knowledge and technology under fair and most favourable terms, including on concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilisation of biological diversity
- Strengthening capacities for technology transfer to user developing country parties and to parties that are countries with economies in transition and technology development in the country of origin that provides genetic resources; also to facilitate abilities of indigenous and local communities to conserve and sustainably use their genetic resources
- Institutional capacity building
- Human and material resources to strengthen the capacities for the administration and enforcement of access regulations
- Training related to genetic resources with the full participation of providing parties, and where possible, for such parties in the providing country
- Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies

- Contributions to the local economy
- Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in provider countries
- Institutional and professional relationships that can arise from an access and benefit-sharing agreement and subsequent collaborative activities
- Food and livelihood security benefits
- Social recognition
- Joint ownership of relevant intellectual property rights

Case 1: Benefit sharing arrangements with the Kani tribe of South India

The Kanis are a tribal community inhabiting the Agastyamalai tropical rainforests of the Western Ghats. Benefit sharing arrangements between the Tropical Botanical Garden and Research Institute (TBGRI) and the Kani tribals of Kerala for the development of a drug called 'Jeevani' based on the knowledge of the Kani tribe ('Jeevani' is a restorative, immuno-enhancing, anti-stress and anti-fatigue agent, based on the herbal medicinal plant arogyapaacha, used by the Kani tribals in their traditional medicine) deserves credit. Within the Kani tribe, the customary rights to transfer and practise certain traditional medicinal knowledge are held by tribal healers, known as plathis. The knowledge was divulged by three Kani tribal members to the scientists of TBGRI who isolated 12 active compounds from arogyappacha (*Trichopus zeylanicus*), and developed the drug 'Jeevani'. The technology was then licensed to Arya Vaidya Pharmacy Ltd, an Indian pharmaceutical manufacturer pursuing the commercialisation of Ayurvedic herbal formulations. A trust fund was established to share the benefits arising from the commercialisation of the traditional knowledge-based drug 'Jeevani'. This experience has provided insight for developing benefit-sharing provisions in the National Biodiversity Policy and Macrolevel Action Strategy, as well as in legislation on biodiversity.

Source: CBD no date c

Case 2: Benefit sharing in Suriname

The International Cooperative Biodiversity Group (ICBG) is a US Government funded programme sponsored by the National Institutes of Health (NIH), the National Science Foundation (NSF), and the United States Agency for International Development (USAID). In 1993, the ICBG awarded a grant to five different institutions who had submitted a joint project proposal for Suriname. The Suriname ICBG group works with local tribal people to conduct bioprospecting activities. The majority of the local participants are Bush negroes, or Maroons, who are descendants of runaway African slaves who escaped Dutch plantations on the coast over three hundred years ago and settled along the river in central Suriname. Six distinct Maroon tribes live in the interior and depend on their extensive knowledge of forest resources for their survival.

The benefit-sharing arrangements and expected results

In Suriname, the ICBG programme is designed to promote drug discovery while conserving both biological and ethnobotanical knowledge. The linking of the various participants is facilitated through a series of oral and written agreements. First, a letter of intent between the Granman of the Saramaka people and Conservation International (CI) was established based on informed consent, as required by Article 15 of the CBD. Renewal of consent by the Saramaka people is also done periodically through formal discussions with representatives of the tribe. The most immediate benefits of the bioprospecting activities, however, come not from the contract which guarantees future royalties, but instead from the up-front compensation, information, training, and technology transfer given in connection with the implementation of the project. Some of these benefits come from activities that are an integral part of the drug development process, for example the knowledge gained from the identification of forest taxonomy and the training of Surinamese university students and faculty in biotechnology and extraction. Other benefits are derived from related projects that are intended to ensure development, conservation, and sustainability, which include the training of Surinamese people in plant collection and identification techniques, ethnobiology, and management.

Source: Guerin-McManus et al. 1999

Session 12
Protection and Documentation of Traditional Knowledge

Time: 90 minutes

Objectives

To discuss the importance of traditional knowledge and the need to protect traditional knowledge through documentation and to review traditional knowledge documentation initiatives in countries.

- To underline the importance of and need for traditional knowledge documentation
- To be aware of the benefits of traditional knowledge
- To understand the provisions for traditional knowledge protection in the ABS laws
- To be acquainted with traditional knowledge documentation initiatives in different countries

Methodology

The methodology to be used in this session depends on the trainer, who can be as innovative as s/he likes.

Suggestions for the trainer

Dedicate this session to reviewing the opportunities for protecting traditional knowledge. Start the session with an explanation of the need for, and importance of, protecting our genetic resources and traditional knowledge in the realm of ABS. Participants' understanding of the critical need for traditional knowledge documentation can be enhanced by carrying out a group exercise that illustrates the importance of documented evidence and stimulates discussion on the theme. A possible exercise is given below or you can choose one of your own. Use the learning outcome from the exercise as a catalyst for further discussion and clarification. Following the exercise, discuss stories of biopiracy that have occurred in the region, leading to the inequitable sharing of benefits. The case of the biopiracy of Neem in which the patent was revoked as a result of documented evidence is a good example.

(continued on next page)

Suggestions for the trainer (continued)

After this, discuss traditional knowledge protection options and documentation initiatives in the region. It is useful to mention the traditional knowledge database, the Traditional Knowledge Digital Library (TKDL) in India and China, and the Biodiversity Register being developed in India. Also give examples of traditional knowledge documentation initiatives in Bangladesh, Bhutan, China, India, Nepal, and other countries. Explain the challenge of having innumerable genetic resources, of which only a few may be commercially significant (and that, therefore, it is no use to start randomly documenting genetic resources). Mention this during the discussion on traditional knowledge documentation and while referring to the traditional knowledge documentation format. Tell participants to refer to the manual for other resources.

Attention!

This session is purely technical and the trainer should have an in depth knowledge of the content. If the trainer is not fully equipped to deal with the content, a resource person(s) can be invited to conduct the session.

Do participants need an energiser?

Activities

Activity 1: Presentation on Importance of protecting genetic resources and traditional knowledge

Activity 2: Exercise – Case discussion on the documentation of traditional knowledge

Time: 30 minutes

Aim

To help participants understand the need for, and importance of, traditional knowledge documentation

- Participants are able to understand the importance of and need for traditional knowledge documentation.
- Participants understand the benefits of documentation
- Participants are able to understand the relationship between traditional knowledge documentation and the ABS regime

Method

Group exercise and discussion

Materials

Handout of fictional case: 'No evidence'

Steps

Step 1 Split the participants into three groups by allocating a number from one to three.
Step 2 Introduce the aim of the exercise.
Step 3 Distribute the example case among the groups.
Step 4 Ask each group to discuss the case within their group.
Step 5 When all groups are finished with the group discussion, open the floor for general discussion.

No evidence

A person named A had a close friend B who was in need of money. A was asked by B to lend him NRs.50,000 for two months. A, without any thought, trusted his friend and gave him the said amount.

After two months had elapsed, B did not show any sign of returning A's money. A asked for the money frequently, but B made excuses and didn't pay him. The relationship between the two turned bitter over the money.

Finally, A filed a case in the court against B. The court dismissed the case because there was no documented evidence that the transaction had taken place. The court needed documentation to prove that B had borrowed the money from A. A learned a lesson, to always document transactions in future.

Questions

1. Why did A lose money?
2. What evidence did the court seek?
3. Why is documentation of evidence necessary?

Activity 2: Discussion on the need for traditional knowledge documentation and initiatives in the region.

The answers to the questions on the example case should lead to further discussion and clarification of the session theme on the importance of, and need for, traditional knowledge documentation.

Session 12 Resource Materials

Traditional Knowledge and its Relevance

Indigenous and local communities have an intrinsic understanding of the area they live in and a knowledge of their natural resources. This knowledge is stored and passed on through their language. Areas rich in language tend also to be rich in traditional knowledge on biodiversity (Oli and Dhakal 2008). However, in recent years, the languages of mountain people have become endangered for a multitude of reasons (Turin 2005, 2007). This also affects people's awareness of and knowledge about their biodiversity as the local words for particular species are lost.

The Hindu Kush-Himalayan region, home to over 210 million people, includes parts of three biodiversity hot spots and is a vast repository of traditional knowledge. Local people know different ways of using wild plants and animals for their livelihoods. These rich resources provide the basis for the food and livelihood security of mountain communities. Communities have used local plants and wildlife since time immemorial – collecting, selecting, growing, and raising varieties of food crops, livestock, and medicinal plants for their livelihoods. Traditional knowledge and practices are extremely important for the livelihoods of such communities, maintaining their health and replenishing the environment. There is a long history of traditional knowledge in the evolution of modern food crops, drugs, and technology. For example, farmers in the Himalayan region domesticated and developed carrots, mustard, gooseberries, apples, pears, apricots, oranges, lemons, and large cardamom. However, as most of the indigenous and local communities in the Himalayan region live in 'development neglect' areas, there is a lack of 'fair and equitable sharing' of benefits from their knowledge (Oli and Dhakal 2008).

In the modern world, several food crops and drugs, such as anti-cancer drugs, antibiotics, anti-malarial drugs, analgesics, anti-neoplastic agents, and osteoporosis drugs have been developed from plant and animal resources with the use of modern technology based on traditional knowledge. Traditional knowledge is very important in modern pharmaceutical research in that it works as an initial screen and can help in isolating the medically significant properties of plants and animals. Traditional knowledge is dynamic and reflects the traditions of communities. It is also by nature collective, and is often the property of the entire community, not belonging to any single individual or entity. Thus, it is imperative to safeguard the sovereignty of this traditional knowledge and to protect it from being misused by bioprospectors obtaining patents for non-original innovations.

Traditional knowledge

Traditional knowledge refers to the knowledge, innovations, and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, and forestry.

Protecting Traditional Knowledge

Case 1: Biopiracy – The turmeric patent

In March 1995, a US patent on the 'Use of Turmeric in Wound Healing' was awarded to the University of Mississippi Medical Center. The claim covered 'a method of promoting healing of a wound by administering turmeric to a patient afflicted with the wound', such wounds included surgical wounds and body ulcers. According to Agarwal and Narain (1996), in India the powder of the turmeric plant is 'a classic grandmother's remedy' which 'has been applied to the scrapes and cuts of generations of children'. In mid-1996 the Council of Scientific and Industrial Research of India (CSIR) requested the US Patent and Trademark Office to revoke the patent on the basis that turmeric powder is widely known and used in India for its wound-healing properties, and that a great deal of scientific research has been carried out by Indian scientists that confirms the existence of these properties. One could easily suppose that the patent was awarded because the applicant had omitted to mention related traditional use of turmeric and to cite the relevant literature. After all, there is a limit to the amount of time patent office examiners can devote to examining each application for novelty, inventive steps, and usefulness. However, the patent description helpfully states that: 'Turmeric, a yellow powder developed from the plant *Curcurma longa*, is commonly used as a food colorant in many Indian dishes and imparts a bitter taste. Although it is primarily a dietary agent; turmeric has long been used in India as a traditional medicine for the treatment of various sprains and inflammatory conditions.' No method for extracting the active principle was described. Instead, the patent simply declared that 'turmeric is a natural product that is readily available in the food store'. Given the admission that turmeric has long been used to treat inflammatory conditions, it is difficult to see how this patent could have passed the tests of novelty and non-obviousness during the examination. This patent was revoked after the CSIR's challenge on the basis of its absence of novelty. CSIR did not succeed by proving that many Indians already use turmeric as a wound healing agent, but because it was able to provide relevant scientific literature as evidence. Patent examiners in the US are not required to accept the evidence of traditional knowledge held outside the US as prior art (i.e., already known) unless it has been reported (and thereby validated) by scientists and published in learned journals or otherwise made available to the public. The inventors, in fact, made no explicit claim that the wound-healing agent (i.e., the turmeric powder) was any different from the one used traditionally by Indians. Ironically, Indians in the US using turmeric to treat their children's wounds were therefore infringing the patent. If the University of Mississippi had been awarded a similar patent in India, tens of millions of people would have become patent infringers!. (Source: Dutfield 2000)

Case 2: Biopiracy – The neem patent

The neem tree (*Azadirachta indica*) originates from the Indian subcontinent and now grows in the dry regions of more than 50 tropical countries around the world. The tree is mentioned in Indian texts written over 2000 years ago and has been used for centuries by local communities in agriculture as an insect and pest repellent, in human and veterinary medicine, and in toiletries and cosmetics. It is also venerated in the culture, religions, and literature of the region.

In 1971, US timber importer Robert Larson observed the tree's usefulness in India and began importing neem seed to his company headquarters in Wisconsin. Over the next decades he conducted safety and performance tests upon a pesticidal neem extract called Margosan-O. In 1985 he obtained a patent for

his preparation of neem seed extract and the Environmental Protection Agency approved this product for use in the US market. Three years later he sold the patent for the product to the multinational chemical corporation, W R Grace and Co (now Certis).

Grace then approached several Indian manufacturers with proposals to buy-up their technology or to stop production of value-added products so that they could concentrate on supplying Grace with the raw material, and set up a manufacturing plant to process neem seed for export in collaboration with P.J. Margo Pvt. Ltd in India. The patent effectively made the traditional use of neem seed extract by farmers illegal. This provoked intense objections from local scientists, farmers and activists. Indian scientists argued that the patent Grace had claimed involved the natural chemical as a stable solution, which did not make it an invention but qualified it as an extension of traditional Indian processes. In 1995, 200 organizations from 35 nations mounted a legal challenge in the U.S. Patent and Trademark Office (PTO) against W.R. Grace on the basis that the knowledge was available at the time of patenting (Rifkin 1995; TWN 1995). At the same time, a legal challenge was mounted at the European Patent Office (EPO) which administers patents under the European Patent Treaty by the organisation of the Indian environmentalist Vandana Shiva, Magda Aelvoet, then MEP, representing the Greens in the European Parliament, and the International Federation of Organic Agriculture Movements. Their joint Legal Opposition claimed that the fungicidal properties of the Neem tree had been public knowledge in India for many centuries and that this patent exemplified how international law was being misused to transfer biological wealth from the South into the hands of a few corporations, scientists, and countries of the North (IFOAM et al 2005).

The EPO Opposition Division ruled in May of 2000 that the product claimed by the would-be proprietors – the United States of America and the multinational chemical corporation W.R. Grace – was "not 'novel' and lacked an 'inventive step', two of the criteria for patentability" and the patent was revoked. However, the patentees appealed that decision; five years later in 2005 their appeal was set aside by the EPO's Technical Board of Appeals following an Oral Proceeding and the patent was definitively revoked.

The attempted patent of neem seed is a good example of a patent successfully fended off. The case not only created a global awareness on neem and its properties but also raised issues on biopiracy, the need for documentation of traditional knowledge, equitable sharing of gains from traditional knowledge, and harmonisation of patent rule. Success of revocation of the European patent illustrates the requirement for systematic documentation of knowledge whether traditional or scientific. Further these cases demonstrate the potential of IPR in creating awareness and, enthusiasm in scientists, entrepreneurs, organisations, and society and increased investments in research and development of products which compete in the market place. This is evident from the upward trend of patents filed globally on neem from 1994- 96 onwards, the intense patent debate period, and the commercial products available in markets from neem.

Concern for traditional knowledge protection

The knowledge and use of specific plants and animals for medicinal and industrial application is an important component in traditional knowledge. With the growth in modern herbal medicines and anti-cancer drugs based on plants such as turmeric and taxol, the cosmetic and food industries have also shown interest in plant and animal genetic resources, their cultivation, and processing. Such knowledge is being exploited at an alarming rate by interested parties. The need for, and importance of, traditional knowledge protection emerges from the fact that in the past many genetic resources and associated traditional knowledge were used by agencies for personal gain. The benefits derived from the use of

these resources were not shared with the owners or custodians of these resources. They were patented in another country as an innovation. Such patents generated benefits in the form of royalties, trademarks, and so forth for the company or individual. Disclosure of origin of the resource was not required. Benefits derived were not shared with the owners of the resource or traditional knowledge. Thus, traditional knowledge has increasingly become the victim of piracy. There is a need to establish traditional knowledge holders' rights over such knowledge. With the increasing number of biopiracy cases and inequitable benefit sharing from utilisation, it has become very important to protect these resources and traditional knowledge.

In many developed countries, like America, documented evidence is needed to revoke a patent. In the case of the neem patent, the patent was revoked only after documented evidence was provided to prove that it was piracy and not innovation. Recognising the gravity of traditional knowledge, the Convention on Biological Diversity (CBD) acknowledges the knowledge, innovations, and practices of indigenous local communities and demands the consent of the holders of such knowledge and practices and the fair and equitable sharing of benefits arising from the use of such knowledge in bioprospecting.

International processes in the protection of traditional knowledge

Article 8(j) of the CBD is important for the protection of traditional knowledge. It recognises the importance of traditional knowledge for the conservation and sustainable use of biodiversity and calls for contracting parties to respect, preserve, and maintain the knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biodiversity. It also calls for parties to involve the holders of such knowledge, innovations, and practices for the equitable sharing of benefits arising from the use of such knowledge, innovations, and practices.

Article 9 (1) of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) acknowledges the enormous contribution made by local indigenous communities and farmers in all regions of the world, and particularly at the centre of origin (countries or places that possess the genetic resources in or under in situ conditions and which have been disseminated from there), which constitutes the basis of food and agricultural production. The World Intellectual Property Organization (WIPO) is in the process of developing a range of practical tools aimed to enhance the intellectual property (IP) interests of the holders of traditional knowledge, resources, and expressions. On the other hand, the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement of the World Trade Organization (WTO) grants private entities and individuals the right to knowledge, which is not in harmony with the CBD and ITPGRFA. This issue is being debated at the TRIPS meetings. The CBD's objective is to regulate access to genetic resources and associated traditional knowledge through national legal systems. The process of addressing the issue of traditional knowledge at the international level is slow. During the Conference of Parties (COP) 8 meeting, the Open-ended Ad Hoc Working Group on Article 8(j) recommended that the protection of traditional knowledge, innovations, and practices with regard to genetic resources be included in the international regime, with input from indigenous and local communities with regard to their experiences of effective protection. The Working Group also discussed sui generis ('a class of its own', 'unique') systems for protection of knowledge, innovations, and practices of indigenous and local communities, and it recommended that parties to the CBD be urged to adopt national and local models for such protection, with full and effective participation and prior informed consent. The Working Group also presented the findings of WIPO regarding issues raised and points made on the relationship between TRIPS and the CBD (UNEP/CBD/COP/8/INF/37) (Lawson and Sanderson 2006).

The 9th meeting of the COP in Bonn in 2008 encouraged further progress towards the integration of the objectives of Article 8(j) and related provisions, including Article 10(c), Article 17, paragraph 2 and Article 18, paragraph 4, into the thematic programme of the CBD and other important scientific and cross-sectional issues. COP 9 noted the progress made in integrating article 8(j) tasks as reflected through the national reports received from countries that are party to the CBD. The COP 9 meeting decided to undertake an indepth review of the progress made towards the implementation of Article 8(j) and related provisions, in order to continue the work of the Working Group on Article 8(J) and with a view to placing greater emphasis on linkages between the protection of traditional knowledge innovations/practices and the conservation and sustainable use of biological diversity and fair and equitable sharing of the benefits arising from the utilisation of traditional knowledge innovations and practices.

While this debate is ongoing at the international level, national governments in the Himalayan countries are developing their biodiversity policies and laws to implement the CBD and protect traditional knowledge in their countries.

Why Document Genetic Resources and Traditional Knowledge?

- To understand the status of biodiversity, the types of genetic resources, their location, and ownership
- To be aware of the traditional knowledge related to genetic resources, traditional methods of using genetic resources, the purpose for which they are used, for how long they have been used, and their ownership
- To understand the gender perspectives of access, division of labour, and control over genetic resources and associated traditional knowledge
- To protect genetic resources and traditional knowledge from biopiracy, establish community knowledge as prior art, and establish the ownership rights of the community
- To design programmes and policies for the conservation and sustainable use of genetic resources that are being threatened
- To build the capacity of local communities for better conservation and sustainable use of resources
- To provide legal protection to the owners of traditional knowledge and ensure the fair and equitable sharing of benefits when used for bioprospecting
- To move forward with the knowledge of prior art and prevent appropriation of traditional knowledge
- To enable the transmission of traditional knowledge for future generations
- To provide evidence of granting of property rights over traditional knowledge to the local communities

Traditional knowledge documentation: A traditional knowledge protection option

In recent years, awareness has been growing of the rich biodiversity in the Himalayas and the value of the region's genetic resources and associated traditional knowledge. In the past, local communities and countries of origin have not been able to benefit from their own resources. Communities and countries

of origin were not informed about their genetic resources and associated traditional knowledge. This prevented them from entering into the benefit-sharing stream for the use of genetic resources and associated traditional knowledge. Hence, there is a need to document the biodiversity existing within communities and under national jurisdiction, covering genetic resources and traditional knowledge.

Documentation of resources and traditional knowledge demonstrates the existence of different genetic materials and associated traditional knowledge within an area. It is evidence of ownership of endemic resources and traditional knowledge, establishes the place of origin, and helps prevent misappropriation, including patenting and piracy, by external agents. Documentation gives indigenous peoples and national governments the evidence they need to fight biopiracy. In addition, documentation helps in controlling illicit exploitation and the movement of genetic resources and associated traditional knowledge outside the centre of origin and helps ensure that the benefits derived from the use of such materials accrue to the holders (providers) of such materials. Documentation also helps to draw the attention of bioprospectors by demonstrating the presence of genetic resources for bioprospecting, thereby allowing holders (providers) of genetic resources and traditional knowledge to benefit from such resources. For these reasons countries/communities in the region have begun to document genetic resources and associated traditional knowledge. After the CBD came into force, many countries in the region initiated the documentation process.

Traditional knowledge documentation initiatives

Initiatives have been taken in India to establish a biodiversity register and to document traditional knowledge, particularly in West Bengal and Kerala, Maharastra, and Madhaya Pradesh by government institutions, NGOs, and the biodiversity management committee at the community level. With the enforcement of the Biodiversity Act through the notification of the Rules, India is ahead in this area in comparison to other Eastern Himalayan countries. In Nepal, traditional knowledge documentation has been initiated on a pilot basis in a few districts by civil society organisations. It is anticipated that the process will be accelerated after the draft ABS bill is promulgated. Bhutan is taking similar initiatives and so is Bangladesh.

The most common and widely known documentation methods are

- inventory of biodiversity in a biodiversity register, and
- traditional knowledge documentation.

Biodiversity registers

Registries of knowledge are ordered collections or repositories of information. Biodiversity registries may be compiled by communities or community groups for the benefit of the communities. They are generally intended to protect local or indigenous rights over genetic resources and traditional knowledge. People's biodiversity registers (PBRs) generally have the categories of information shown in Box 6. Where those outside the community have access, there is typically an effort to control this access so as to define the terms on which the knowledge is used, including provisions for the sharing of benefits from use with the providers. An example from Pattuvam village in Northern Kerala in India shows how the local community has taken control over genetic resources and is protecting them (Box 7). A biodiversity register has been prepared in India to document the biodiversity of the area through data collection. A sample format used in Ernakulum District in Kerala is provided in the resource section of the next session (Resources Materials for Session 13).

Box 6: Information categories in a 'people's biodiversity register'

The following categories of information are contained in a people's biodiversity register:

- Types of user groups using local biological resources (the 'peoplescape')
- Mapping of the mosaic of ecological habitats of the study site (the 'landscape')
- The ecological history of the study site
- The extent and distribution of local collective and individual knowledge about different species of plants and animals and their uses (i.e., the knowledge base)
- The abundance, scarcity, and distribution of living organisms
- Patterns of economic (subsistence and commercial) utilisation of living resources
- Efforts to regulate uses of living resources or to conserve them, both by government agencies and local communities
- Development aspirations of local communities and how these relate to local biodiversity
- Divergences and agreements among the various local groups concerning the management of natural resources
- Emerging options for managing the natural resources of the study site, with particular focus on biodiversity conservation

Source: Gadgil (nd)

Box 7: Local community traditional knowledge documentation initiatives in Kerala, India

In Pattuvam village, in Kerala, training was given to school teachers and community people in surveying and documenting traditional knowledge and in register preparation. A Village Biodiversity Register was prepared and handed over in a symbolic ceremony by an elderly citizen to a youth. The youth then handed the Register to the village Sarpanch (village head) to safeguard and protect the interests of the community for future generations.

The village issued a declaration, placing controls over identified genetic resource cultivars growing within the village boundaries. There was an exhibition of important native species and farmers were honoured for conserving the resources. In this way the community declared its intellectual property rights (IPRs) over the resources.

Traditional knowledge documentation

Documentation of the traditional knowledge related to genetic resources (biodiversity) is complementary to the documentation of the genetic resources themselves. It provides valuable information for advancing the understanding of the value of genetic resources and serves as a welcome reference and guide for academic and commercial research. It also helps to establish effective commercial links between bioprospectors and traditional knowledge holders. It gives local communities pride in their heritage. The knowledge found in remote areas held by indigenous communities can be transformed into a valuable commodity from which the community can benefit. For this reason, many communities and national governments are documenting the traditional knowledge within their jurisdiction, in accordance with the legal provisions of their countries.

Session 13
Review of Sample Formats for Traditional Knowledge Documentation

Time: 60 minutes

Objectives

To review and practice a sample traditional knowledge documentation format.

- To know about and understand various traditional knowledge documentation formats
- To aquaint participants with a sample traditional knowledge documentation format

Suggestions for the trainer

Dedicate this session to reviewing various traditional knowledge documentation formats and a sample biodiversity register. Tell participants that a sample format for documenting traditional knowledge, including processes, has been developed and used for traditional knowledge documentation, distribute the format, and ask participants to review it. Discuss and clarify any specific points raised. This session is technical and the trainer should have an understanding of the sample traditional knowledge documentation format and experience of using it in the field. The trainer should know each component of the format, and the reason for each component.

Participants may come from different places. Note that the format can be adapted for use in their area.

Activities

Activity 1: Review of traditional knowledge documentation formats

Three different sample formats are distributed to participants for review and then discussed. Trainees should agree which format to adopt for the field exercise.

Session 13 Resource Materials

Traditional Knowledge Documentation Sample Formats

Sample Format A: Traditional knowledge documentation format package developed and practised by the Government of Nepal

Biodiversity and traditional knowledge documentation
Prior informed consent information letter

_____ have realised the need to recognise and promote grassroots innovations and traditional knowledge of individuals/communities. To this effort, an initiative to document the biodiversity is necessary. Therefore, this is a step to document biological resources and associated traditional knowledge. This will help in reducing the erosion of knowledge, and will preserve and protect the knowledge of the community.

Information on traditional knowledge holders

Local committee representatives

Name	Address	Signature

Community representatives

Name	Address	Signature

Supporting organisations for documentation:

Local resource persons:

Names of supporting individuals:

District officials

District Development Officer	District Forest Officer
Signature: _____	Signature: _____
Name:	Name:
District:	District:
Date:	Date:

Part I: Community biodiversity documentation

Details of the community

Village/Name of the community:
District/Province:
State:
Country:

Total population:
Male:
Female:

Senior citizens:
Male:
Female:

Total agricultural land:

Total forest area:

Major biodiversity areas:
Area under agriculture:
Area under forests:
Protected areas:
Grazing land:
Wetland area:

Major agricultural systems:
Major food crops:
Major livestock:
Forest types:

Major biological resources found in forests and their types:

Major wild animals:

Major birds:

Name and types of daily use plants:

Name and types of daily use animals:

Name and types of daily use microorganisms:

Map of the community

Part II: Community biodiversity documentation

Village: Ward No: VDC/ Municipal area: District: Date:

Name of Bio-resource	Local Name and Local Language(s)	Type	Unique Characteristics	Location and Habitat	Since When in Use
1	2	3	4	5	6

Source of Seed Gene	Part and Products Used	For What it is Used	
		Uses (e.g., Rituals, Economic, Social, Cultural, Medicinal	Properties
7	8	9	

Processing	Methods of Use	Involvement in Terms of Gender, Caste, Person, Religion, Occupation		
Since When in Use	Source of Seed Gene	Preservation	Processing	Consumption and Use
10	11	12		

Economic Value; Nature of Marketing, Credit (How Much, Where, Who)		Status of Sources		
Local level	Outside VDC	Sufficient	Central	Scarce
13		14		

Involvement in Terms of Gender, Caste, Person, Religion, Occupation			Resource Person and Group
Increasing	Stable		Decreasing
15			16

Part III: Traditional knowledge, skill, technology, products

SN	Name of the Traditional Knowledge, Skill, Product	Why to Make or Use	How to Make or Use	What, Where, and Who Involved	Market Conditions	Resource Person

Sample Format B: Format for data collection under People's Biodiversity Register project (Ernakulum District, Kerala, India)

Kerela sashtra sahitya parishad

Millets

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Oilseeds

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Commercial crops/cash crops

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Tuber crops

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Vegetable crops

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Legumes

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Fruit

Sl.No	Crop	Variety/local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Medicinal plants

Sl.No	Crop	Scientific name	Local use	Cultivating or not	Using for medicinal industry	Local availability	Other information

Aromatic plants

Sl.No	Crop	Variety/ Local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Grasses/fodder plants

Sl.No	Name	Scientific name	Main uses	Using part	Other uses	Availability	Extinct

Wild relatives of domesticated plants

Sl.No	Name	Scientific name	Main uses	Using part	Other uses	Availability	Extinct

Garden/ornamental plants

Sl.No	Local name	Scientific name	Special features	Cultivating for commercial purposes	Commercial consumption	Other information

Chewing crops

Sl.No	Crop	Variety/ Local name	Scientific name	Special features	Using or extinct	Seeds available or not	Other information

Plants collected from forest areas

Sl.No	Name	Scientific name	Special features	Cultivating for commercial purposes	Commercial consumption	Other information

Timber

Sl.No	Name	Scientific name	Main uses	Using part	Marketing or own use	Other information

Livestock/birds

Sl.No	Name	Scientific name	Special features	Cultivating for commercial purposes	Commercial consumption	Other information

Medicinal fauna

Sl.No	Local name	Scientific name	Local use	Cultivating or not	Using for medicinal purposes	Local availability	Other information

Fish

Sl.No	Variety/Local name	Scientific name	Special features	Using or not	Availability	Other information

Insects/pests

Sl.No	Crop	Variety/ local name	Scientific name	Special Features	Season of occurrence	Management practices	Other information

Weeds

Sl.No	Name	Scientific name	Main crop infested	Uses	Season of occurrence	Management practices

Traditional labour class

Sl.No	Class name	Occupation	Using plants or animal	Problems facing	Management practices

Knowledge holders

Sl.No	Name	Address	Age	Occupation	Management practices

Traditional skilled persons

Sl.No	Area of knowledge	Person	Features	Other information

Source: IUCN 2005

Sample Format C: Format for documentation of herbal practices

National Innovation Foundation
Guidelines for preliminary documentation of herbal practices

Part 1

Name of the knowledge holder:	
Name of the community leader (if community knowledge)	
Name of the scout	
Address and contact no. of the scout	
Address of the knowledge holder	
Village/bazaar/ town	
Locality	
Post office	
District	
PIN	
State	
Phone no. (if any)	
Nearest town or important place	
Name of the road to the innovator place	
Date of birth	
Gender (male/female)	
Education Primary Secondary	
Occupation	
Experience	

* Brief note on the knowledge holder:

Part 2

1. Herbal practice (human health/animal health/bio-pesticide/any other – please specify)
2. Use of the practice/name of the ailment/disease
3. Symptoms of the situation/ailment/disease
4. Plants used

Sl No.	Name			Parts used	Amount used
	Local	English	Botanical		
1					
2					

5. Other ingredients

Sl no.	Name			Form used	Amount used
	Local	English			
1					
2					

6. Method of preparation:

7. In case of herbal medicine

Method of administration (Orally/external application)	
Dosage (How much, how many times a day, how many days, before food/after food etc.)	
No. of patients treated	
Method of application	
Dosage/Time of	

8. Precautions to be taken (if any)
9. Whether the practice is (a) traditional knowledge, (b) his own new innovation, or (c) improvement by the innovator on already existing practice.

*Dried samples/herbarium/photographs of plants used in the practice are required to be submitted for authentication

Session 14
Process of Traditional Knowledge Documentation

Time: 60 minutes

Objectives

To review and understand the traditional knowledge documentation process and discuss the requirements for fulfilling it.

- To know about the methods of traditional knowledge documentation
- To understand about preparation for traditional knowledge documentation
- To outline the steps in the traditional knowledge documentation process
- To allow participants to practise documentation using the format

Methodology

The person who presents the session can choose to do a verbal presentation, use a media tool such as PowerPoint, or come up with his/her own innovative methodology. If a media presentation is chosen, prepare it in advance and set up the equipment before the session starts.

Suggestions for the trainer

Start by reviewing the methods of traditional knowledge documentation (Resource Materials for Session 12). Discuss the importance of advance planning and preparation for traditional knowledge documentation and what preparation has to be done, such as identifying the site, collecting background information, and committee formation. Mention that the resource materials outline the preparation in detail.

Following this, the participants should discuss in detail the steps that are actually carried out in traditional knowledge documentation. Mention that the method chosen for the documentation of traditional knowledge will influence the steps. Tell participants that the steps provided in the resource materials can be followed for either multidisciplinary or participatory documentation. Discuss the after-documentation initiatives for safeguarding the document registry through additional documents that mention the committee, the terms and conditions, and ethics related to confidentiality, personal benefits, accountability of committee members, and the custodian

(continued on next page)

Suggestions for the trainer (continued)

responsible for the safe deposit of documents. In addition, explain the clauses containing the terms and conditions of access and use of documented genetic resources and traditional knowledge adopted in Kerala as a safeguarding measure. It is important to mention that there will be a role play on traditional knowledge documentation in the next session, which will help clarify any problem areas for the participants. Remind participants that the resource materials for the session are provided in the manual.

Attention!

This session is purely technical and the trainer should have an in depth knowledge of the content. If the trainer is not fully equipped to deal with the content, a resource person(s) can be invited to conduct the session.

Do participants need an energiser?

Activities

Activity 1: Presentation on process of traditional knowledge documentation.

Activity 2: Discussion on steps in traditional knowledge documentation.

Session 14 Resource Materials

Methods of Traditional Knowledge Documentation

Types of documentation

Multidisciplinary documentation

The documentation team should be multidisciplinary and preferably include, but not be limited to:

- a community leader,
- community experts (as a source of traditional knowledge),
- an outside expert,
- a legal expert (to provide guidance on the issue of protecting community intellectual property rights),
- a natural resource management specialist(s), and
- an anthropologist (to provide facilitation and packaging of various knowledge products).

Participatory documentation

The documentation activities should be based on consensus and converging interests between the involved organisations and the indigenous communities/knowledge holders. The documentation should not be extractive, rather there should be two-way information sharing. This will help the community to register their ownership of the knowledge.

Community-initiated documentation

Sometimes communities themselves may take the initiative to document their knowledge. This involves community-based groups or committees who have acquired the knowledge and skills to carry out the process themselves without external intervention.

Documentation initiated by government institutions

The ABS legislation in many countries provides for a biodiversity management committee at the local level, which is legally sanctioned to undertake documentation tasks within their jurisdiction. Similarly, in India, local level government functionaries such as the panchayat can conduct traditional knowledge documentation.

Preparation for documentation

Identification of the site and collection of demographic data

The site where the traditional knowledge documentation will be carried out should be chosen. The basic demographic data of the community where the traditional knowledge documentation will be done should be gathered, such as:

- Name of the community
- Location/address
- Total area
- Total number of households
- Total population of the village
- Ethnic groups at the site
- Major occupations
- Education status
- Health facilities

Identification of resources

An inventory registry listing all the important genetic resources and associated traditional knowledge in the jurisdiction of the community should be prepared first. This will give an idea of the richness of biodiversity in the area. Important agricultural resources such as food crops, birds, forest types, types of horticultural plant varieties, the main livestock used in that community, and others should be gathered.

Identification of knowledge holders

Knowledge holders are critical to the process as they are the key informants of genetic resources and associated traditional knowledge. In a community, the knowledge existing in individuals may vary with age, gender, occupation, location, and so forth. It is possible that older people in the village, traditional healers, herbal practitioners, or others may have a higher level of knowledge than others. Therefore, it is important to identify them for the traditional knowledge documentation process.

Language of the traditional knowledge document or registry

The traditional knowledge can be documented by the community in their own language or other existing local languages in their area of jurisdiction. However, if any learned person whom the community trusts within the community agrees to provide a translation into the national language or into English, this can be done.

Preparation and steps for traditional knowledge documentation

Traditional knowledge documentation steps

The following steps should be taken when documenting traditional knowledge:

- Identify and select the area of jurisdiction (e.g., settlement, village, ward, or district) where the traditional knowledge documentation is to be carried out.
- Identify the genetic resources and traditional knowledge in that jurisdiction.
- Identify important traditional knowledge holders who are key informants.
- Gather the community representatives of the jurisdiction where traditional knowledge documentation is to be carried out for a preliminary discussion on the traditional knowledge documentation initiatives. During this discussion, they should be made aware of the need for, and purpose of, documentation and the consent of the community representatives to the documentation should be obtained.
- The consent of key informants who have a higher level of knowledge on genetic resources and associated traditional knowledge and who are vital to the process, such as the traditional healers,

older people, herbal practitioners, local health tradition representatives, and lead farmers, should be obtained by organising a special training where awareness is generated and at which they can agree to be part of the process. Note: These key informants may have a protectionist perspective because they hold the 'trade secrets'. Hence, icebreaking and trust building is necessary.

- A likeminded representative committee consisting of community-based, non-government and government organisations should be formed for the traditional knowledge documentation, or the community themselves can form a representative committee including likeminded community members for their traditional knowledge documentation.
- Where the area is very diverse, representatives or key resources persons working in the field of agriculture, forest and soil conservation, botany, livestock, mycology, geology, zoology, taxonomy, anthropology, social sciences, and so forth, can be included in the committee. Community representatives should include community forest user group members, women, dalits, indigenous groups, older people, traditional health practitioners, and so forth. The committee should be formed in such a way that it is representative of the community and contains likeminded individuals who are aware of, and understand the need for, traditional knowledge documentation.
- Review the necessary statutory and customary laws for traditional knowledge protection. If there is no national legislation that covers the protection of traditional knowledge, then existing customary laws can be used or modified to cover traditional knowledge protection, and its access and benefit sharing.
- Prepare and finalise the format to be used for the documentation. Documentation should cover the following:
  - A map of the community and the traditional knowledge documentation site, date of collection, collection team, and details of collaborating organisations
  - The name of the biological resources, local name, varieties, where they are found (e.g., altitude, type of land), special characteristics, parts used, properties, methods of harvesting, processing, and final preparation for consumption, dosage, and so forth
  - Associated traditional knowledge related to the genetic resources, skills and knowledge (which does what)
  - The names of the traditional knowledge holders related to genetic resources and associated traditional knowledge
- Select the method to be used for traditional knowledge documentation
  - A format given to the community team who then document the traditional knowledge themselves
  - Individual interviews or discussions with key informants in the jurisdiction carried out by the documentation committee
- After the method is selected, planning and preparation activities should be completed, such as rapport building, pre-training of the committee members, pre-documentation training, and other necessary activities.
- The documentation exercise should be started as soon as the planning is over. Documentation can take anywhere from a few days to months depending upon the area to be covered, the pace at which it is carried out, and the smoothness of the process. traditional knowledge documentation is an ongoing process.
- After the documentation exercise, the format(s) should be compiled and gathered at one place into a registry document.
- A final gathering of community representatives and committee members should prepare a cover evidence document to safeguard the biodiversity traditional knowledge register. This should contain a memorandum of understanding between the community and the documentation committee containing

clauses dealing with the process and protection of the document including terms and conditions on confidentiality, disclosure of information by committee members, names and signature, along with the photographs of the members to ensure future accountability and custodianship.

- The community members and committee team should agree on the terms and conditions of access, use, and benefit sharing in relation to the genetic resources and associated traditional knowledge documented in the registry. An example can be drawn from the state of Kerala in India where the community, after documenting their traditional knowledge in the form of a biodiversity registry, declared a deed agreement to protect the traditional knowledge contained in the registry, and laid out conditions and terms for access and use of their resources. This deed is known as the People's Biodiversity Charter and its clauses are given below for reference.

Clauses of the People's Biodiversity Charter from Kerala

- No patent or other forms of monopoly claim made in the past on life forms or any resultant future claim based on these past patents or monopolies shall have the recognition or sanction of the people coming within the territory of this Registry.
- Henceforth, life forms, their seeds, cells, genes or properties of life forms existing within the territory of this Registry regardless of whether all these life forms are known to us by their names or not, whether we are using them through our direct knowledge or not, shall under no circumstances be subjected to patents or other monopoly rights.
- Any collectors, whether individuals or institutions, the world over holding specimens of life forms indigenous to this territory are bound by this declaration to reveal their collection, and if any of these life forms are facing decimation or are extinct in this territory, collectors holding such specimens shall return them to us.
- Henceforth, no specimen of life forms shall be taken out of this territory, if studies on any life forms existing here become necessary, such studies shall be done within this territory with the informed consent of the people of this territory.
- Henceforth, any experiments on life forms collected in the past, indigenous to this territory shall be done only with the informed consent of the people of this territory.
- Any experiments in the field of genetic engineering using genetic specimens of life forms indigenous to this territory shall be done only with the complete knowledge and informed consent of the people of this territory and all information regarding such experiments shall be given to us and no secrecy shall be maintained.
- Considering the grave threat genetically modified organisms (GMOs) pose to an ecosystem, any such introduction of GMOs shall be done only after giving us the complete information regarding such organisms and after obtaining the informed consent of the people of this territory. Any act of introduction of GMOs without our consent shall be treated as an act of violence and war on the biodiversity of this region.
- Considering the role-played by the link between wild ecosystems and human habitats in the healthy growth and evolution of biodiversity, any intervention in such wild ecosystems adjacent to this territory shall be done only with the knowledge and consent of this territory.
- Life forms collected from this locality, or the cells, genes or properties of such life forms in their natural form or genetically engineered forms under any circumstances shall not be used for military purposes.

Source: Navdanya no date

Session 15
Community Selection, Group Formation and Field Assignments

Time: 60 minutes

Objectives

To select a community and assign participants to groups for the practical documentation exercise.

- To select a community or individuals for the field traditional knowledge documentation exercise
- To assign participants to groups
- To prepare groups for the field exercise

Methodology

The methodology used in this session depends on the trainer who may choose to do a verbal presentation or use other innovative methodology.

Suggestions for the trainer

This session is dedicated to preparation for the field visits the next day. Advance preparation by all is very important.

Selection of field location

Based on where the training takes place, you should make prior enquiries and contact either partner organisations or use their contacts to select the village/ward for the field visits. Choose a location that is rich in biodiversity and traditional knowledge. The location is best chosen prior to the training. If no location has been selected, select a field location during the training with the help of the training participants.

Activities

Activity 1: Exercise – Field visit groups and assignment

During the session, participants are divided into groups for the field visits for traditional knowledge documentation on the following day.

Steps

Step 1 Split the participants into three groups (or more if appropriate for the situation) by allocating each person a number from one to three (or facilitate formation of volunteer groups, if appropriate)

Step 2 Introduce the aim of the group formation.

Step 3 Brief the groups about the field visit.

Step 4 Ask each group to nominate a group leader who will coordinate the group during the field visit.

Step 5 Brief them about the assignment and their roles and responsibilities during the field assignment.

Step 6 Make them aware of ethics, prior informed consent, and cultural sensitivity for field assignments.

Step 7 Answer any questions participants may have and clear up any confusion.

Step 8 After all the groups are clear on their roles and the field visit, move to the theme.

Documentation practise

Depending on the experience of participants, they may wish to practise documentation before the field visit. This practice session can be carried out on request of the participants and/or if the trainer considers that it will be useful. The trainer should choose between the two different exercises provided: a role play exercise for a group discussion (Exercise 2a) and a role play exercise for an individual interview (Exercise 2b). The trainer can play the part of a traditional knowledge documenting representative in the role play. This will help to ensure that important aspects are covered.

Aim of Exercise

To help participants understand the traditional knowledge documentation process and the ethics, roles, and responsibilities involved in the interview process, and to give them an opportunity to practise the format.

Materials required

Traditional knowledge format, pens, flip chart

Activity 2: Exercise a – Traditional knowledge documentation role play: Group discussion

Time: Minimum 20 minutes

Method

Group discussion role play

Steps

Step 1 Ask two groups to volunteer for the group discussion role play, and the remainder to be the audience.

Step 2 Introduce the aim of the exercise.

Step 3 Distribute the roles among the groups.

- First group: Community representatives
- Second group: traditional knowledge documenting representatives

Step 4 Each group should be briefed on the role that they will be playing.

Step 5 Mentor each group on their roles and functions.

Step 6 Spend time with each group to help them prepare for the role play. Allow at least 5 minutes for the participants to prepare for the role play.

Step 7 When the groups are ready, start the role playing exercise.

Step 8 The trainer and audience should observe the role play carefully.

Step 9 After the role play is finished, open the floor for discussion.

Step 10 Use a flipchart to record the participants' role play outcomes.

Step 11 Use the outcome of the role play as a pointer to explain the traditional knowledge documentation process, principles, roles, and responsibilities in detail.

Step 12 Discussion and clarification should be carried out until it is time to end the session.

Exercise b – Traditional knowledge documentation role play: Individual interview

Time: Minimum 20 minutes

Method

Individual Interview role play

Steps

Step 1 Ask one participant and one group to volunteer for the role play, and the remainder to be the audience.

Step 2 Introduce the aim of the exercise.

Step 3 Distribute the roles among the volunteers.
Individual participant: traditional knowledge holder
Group: traditional knowledge documenting representatives

Step 4 The individual and group should be briefed on the roles that they will be playing.

Step 5 Mentor the volunteers on their role and functions.

Step 6 Allow at least 5 minutes for the participants to prepare for the role play.

Step 7 When they are ready, initiate the role playing exercise.

Step 8 The trainer and the audience should observe the role play carefully.

Step 9 After the role play is finished, open the floor for discussion.

Step 10 Use a flipchart to record the participants' role play outcome.

Step 11 Use the outcome of the role play as a pointer to explain the traditional knowledge documentation process, principles, roles, and responsibilities in detail.

Step 12 Discussion and clarification should be carried out until it is time to end the session.