Testing understanding: ABS scenarios

This exercise is designed to test the level of understanding of ABS implementation using a series of 'scenarios' relevant to the work of researchers and collection holders. You may wish to select particular scenarios that are most relevant to the group, or to use these scenarios as a starting point for designing new ones.

Because every country will have different ABS laws or policy approaches in place, these scenarios should be explored after training or other input on the national ABS framework, so that participants have some understanding of the national ABS measures in place regarding both genetic resources and associated traditional knowledge.

Running the exercise

For this exercise, participants should separate into small groups of 2-6.

- Each group can work on one scenario (or two, for a longer exercise); provide one or two copies of that scenario to the group.
- You will need to distribute a copy of ITPGRFA Annex 1 for scenario 3.
- Each group should appoint a rapporteur, then discuss the scenario and guiding questions for 30-40 minutes.
- Groups should then report back to plenary, for questions and answers.
- You may wish to project the slide for, and read aloud, each scenario while it is discussed in plenary; alternatively, you can distribute more copies.

Trainer preparation/discussion prompts

A. General points – for all scenarios

Stakeholders: Consider at least the immediate provider, the immediate partner and the regulator, but you may wish to widen the discussion.

Resources accessed: Might include material associated with a plant specimen (such as pathogens, soil, algae…), as well as associated traditional knowledge.

Activities: Focus on thinking through all of the activities involved in each scenario and how they are covered by national ABS measures. (for example in Ethiopia, 'access' is defined as 'collection, acquisition, transfer or use of genetic resources and/or community knowledge').

Official documents required: refer to the national ABS authority's training and/or information materials and website; also consult the ABS laws / regulations themselves. Find out what national ABS authority or authorities should be consulted if there are questions, and if there are resources available regarding community authorities and customary laws and protocols. Find out about any simplified access procedures that might apply for non-commercial research, and any permissions required for transfer to third parties and/or export, or for sale. Also bear in mind non-ABS documents (e.g. phytosanitary certificate, CITES permits) and other countries' ABS requirements.

Benefit-sharing: Try to keep the focus on the particular situation(s) in each scenario, and consider non-monetary benefit sharing, rather than looking only to the distant future for monetary benefit-sharing after possible commercialisation.

Keeping track of ABS-related information: Encourage participants to give examples of how they could link ABS documents (permits, agreements), and the terms and conditions they hold, to specimens – for example by using numbering systems to keep track of documents, putting document numbers and/or particular restrictions onto labels or into spreadsheets or databases.

B. Particular scenario points

Scenario 1.
Ask participants about processes for using material from national genebanks, for non-commercial research and for exploration for commercial potential. Consider at what point the responsibility might switch over from X to Y, when you might need to involve the competent national authority, and if there are any remaining responsibilities for X once Y holds the material (and if X should receive a share of the benefits).

Scenario 2.
Remind participants that both the juniper and the pathogenic fungus are being accessed. Bear in mind the European researchers also have responsibilities - to comply with your country's restrictions on the material and share any benefits as agreed. Does University A have an ABS code of conduct or policy? You can also ask whether the group thinks the University A researchers might be able to keep any of the material after the research is completed – this will depend on your country's ABS measures and the terms of access/export. New prior informed consent may be needed. (As a side point, because the utilisation takes place in the European Union, the researchers will need to follow EU procedures too, to show the resources were legally acquired according to a Nagoya Party provider's ABS laws.)

Scenario 3.
Participants will need to check whether (1) the genebank is located in a country that is a Contracting Party to the ITPGRFA or in an International Agricultural Research Centre; (2) the material is on Annex 1; AND (3) if the use is for food/feed purposes. Note that of the examples here, only 'natural health product research' is not a food/feed purpose; also, regarding cassava, only *Manihot esculenta* is on Annex 1. Phytosanitary certificates and/or import permits may still be required. If the transfer cannot be covered by the SMTA, national ABS measures of the country where the genebank is located might apply.

Scenario 4.
Participants should consider the rights and interests of the communities concerned. Even if a simplified access procedure applies to your work in your country, you should still follow any customary laws or community protocols, and good practices for working with communities and their knowledge. In particular, you should obtain consent from the appropriate community authorities and/or knowledge-holders (according to the community's customary laws and protocols) to record the knowledge associated with the plants, and to disseminate that knowledge by including it on herbarium labels (and in databases, etc.) or public plant signs where it could be read by others (especially if you put herbarium specimen images and data online) It is advisable to share more general information rather than precise recipes!

Scenario 5.
Again, participants should consider rights and interests and follow any customary laws or protocols of the communities that shared the knowledge. Think about how you can inform the communities about the company's interest and how you could help them to benefit – or if it is more appropriate (or a requirement under domestic law) to involve your country's competent national authority at this point. Endemic plants are likely to have restricted ranges and populations, and so there will be some conservation and legal concerns regarding their collection and export.

Scenario 6.
Again, participants should consider rights and interests of the communities and the knowledge holders, and any customary laws and community protocols. Healers may or may not agree to share their knowledge, and higher-level permission from community authorities may be needed; you will need work with them to establish agreement on suitable arrangements for access to the knowledge and for benefit-sharing. Regarding plant sales – some might consider such sales to be 'commercialisation' and so this could be a change of intent in the use of the plant (likely acquired for conservation/research/display purposes) that might require the garden to obtain new prior informed consent from the providers. If the garden is able to sell plants to local visitors for domestic use, but national laws restrict commercialisation or export, this should be clearly signalled.

Scenario 7.
Here, the researcher is a foreign user. Participants should think about what questions the researcher should ask colleagues from the African country (and that country's ABS national focal point and/or competent national authority) about the process for foreigners to collect genetic resources from that country, such as whether or not they can collect legally under the local institution's permits, as well as whether foreigners can export the material for research, and then keep the specimens for the collections and further research. Furthermore, many succulent species are CITES-listed, so appropriate CITES permits must be acquired.

Scenario 1

Research on interesting properties of an aromatic plant

Your research program at X University seeks to investigate the insecticidal or insect-repelling properties of several wild aromatic plants. For fresh samples for your tests, you plan to request material from your country's national field genebanks.

You plan to collaborate with Y University (also in your country), which has just acquired new equipment to identify and analyse active ingredients. You plan to send material over to the Y lab for joint research.

Y University would like to keep leftover material for future research and development towards a potential insect repellent.

a) Who are the main stakeholders?

b) What are the resources being accessed?

c) Whose permission might you need, for what activities, and when?

d) What official documents might your institute need to cover transfers / uses for this particular research?

e) What benefits might arise from these particular activities, and how might they be shared?

f) What ABS-related information will you need to keep and link to material, and how?

g) What official ABS-related documents do you think Y University might need for further potential exploration?

h) Can you think of other points or issues to consider?

Scenario 2

A research collaboration opportunity abroad

You work at a national research institute and would like to collaborate with University A in the European Union to investigate, using newly developed assay techniques and specialised equipment, the genetic variability of juniper fungi that your group has collected from the field.

You plan to visit University A and bring samples of the diseased juniper. You will be trained on the equipment and work in collaboration with several European researchers.

a) Who are the main stakeholders?

b) What resources are being accessed, and who is accessing them?

c) Whose permission might you need to get, and when?

d) What documents might you need? What other documents could help?

e) What benefits might arise from this work? How can they be shared?

f) What ABS-related information will you need to keep and link to material, and how?

g) Can you think of other points or issues to consider?

Scenario 3

Acquiring plant genetic resources from the Multilateral System

For this scenario, you will need to consult Annex 1 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). CP: Contracting Party to the ITPGRFA; NP: non-Party to the ITPGRFA; IARC: International Agricultural Research Centre.

You work in a technical university and have been tasked with the paperwork to acquire samples from overseas genebanks for various diverse research programs.

a) For which requests could the Standard Material Transfer Agreement potentially be used? If the SMTA cannot be used, what is/are the reason(s)?

	Genebank location	Germplasm	Research use
i.	Uganda (CP)	8 cowpea varieties	Drought resistance genetic markers
ii.	South Africa (NP)	5 yam varieties	Natural health product research
iii.	Brazil (CP)	5 cassava varieties	Disease resistance trials
iv.	China (NP)	8 soybean varieties	Nutritional research
v.	IRRI (IARC)	30 rice varieties	Research on yield and heat stress

b) What other official documents might you need to use to acquire these materials?

c) What kinds of benefits might arise from this work and how might they be shared?

d) Can you think of other points or issues to consider?

Scenario 4

A survey of biodiversity and community knowledge

Your botanic garden would like to collect plants in a forest patch next to a community as part of a biodiversity survey. You will press and dry the plants to make herbarium samples for identification and long-term storage, and you plan to digitise the specimens to share images and information with other scientists.

You also plan to record community knowledge about the plants. You intend to add this information to herbarium specimen labels and to use the traditional knowledge for public plant signs, and you or your colleagues might also use the information for future research.

a) Who are the main stakeholders?

b) What is being accessed?

c) Whose permission might you need to get, for what actions, and when?

d) What documents might you need to cover your activities?

e) What benefits might arise from this work, and how could they be shared?

f) How will you keep track of specimens, information and permissions?

g) Can you think of other points or issues to consider?

Scenario 5

Sharing a beauty tip from local communities

Your botanic garden displays an endemic plant whose roots have traditionally been used by women to soften their skin. You collected this information from local communities and have shared it on interpretation signs in the garden.

A local company with international connections is interested in exploring this characteristic (a representative found out about it when visiting your garden!), and has asked you to supply some plants for research and development of cosmetic creams.

a) Who are the main stakeholders?

b) What is being accessed?

c) Whose permission might be necessary, for what activities, and when?

d) Can you supply the plants? What document(s) might you need for such transfer?

e) What benefits might arise from this work, and how might they be shared?

f) Would your answers be different if the plant was not endemic?

g) Can you think of other points or issues to consider?

Scenario 6

Raising public awareness of traditional medicines

Your botanic garden would like to raise awareness of traditional knowledge associated with plants, by developing a medicinal plant garden to help people understand how important plants are for health. You plan to ask local healers for their information, to share with the public.

You would also like to sell the plants in the garden visitor centre shop so that more people can learn about and grow traditional medicinal plants.

a) Who are the main stakeholders?

b) How could you gain the trust of the traditional healers?

c) Whose permission might you need to get, for what activities, and when?

d) What documents might you need for these various activities?

e) What are the resources that are being accessed?

f) What benefits might arise from this work, and how might they be shared?

g) Can you think of other points or issues to consider?

Scenario 7

An opportunity to study another country's biodiversity

As a taxonomic expert on several succulent plant genera, based at Z University Botanic Garden, you are providing expertise to a regional project focusing on impacts of climate change on semi-arid biodiversity. This summer, you will be attending a project workshop in a semi-arid area of a country in eastern Africa.

The African institution leading the workshop has also organised a biodiversity survey near the workshop location, and has invited project experts to participate. Herbarium specimens and samples in silica gel will be collected for the African host institution but you and other experts would like to collect some duplicate material to take back for Z University Botanic Garden collections and research programs.

a) Who are the main stakeholders?

b) What is being accessed?

c) What questions should you ask your colleagues at the institution arranging the fieldwork? Who else could you ask for information?

d) Whose permission might you need to get, for what actions, and when?

e) What documents might you need to cover your activities?

f) What benefits might arise from this work, and how could they be shared?

g) What ABS-related information will you need to keep and link to material, and how?

h) Can you think of other points or issues to consider?