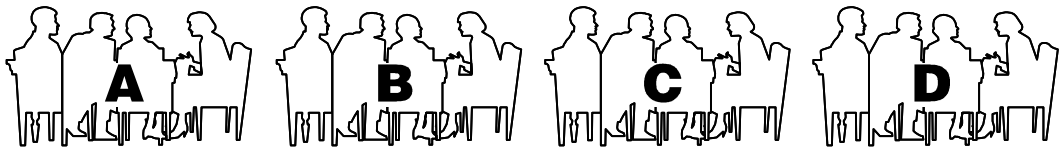
Exercise 1A. Access and Benefit Sharing

('trip around the tables')

1. Form four groups. Each group elects a rapporteur. (5 minutes)



Phase 1. Group work (40 minutes)

2. All groups read handout 1A.4 briefly, and discuss the following case:

The History of Taro in a Pacific Island Country Called Samuatu

1. Prior to 1993, Samuatu cultivated taro and was a major exporter of taro to New Zealand and other non-Pacific Island countries, earning significant foreign exchange. Only one variety was exported and this was a local Samuatuan variety. In addition to the importance of taro as an export crop, it was also very significant culturally. Other root and tuber crops were consumed, but none was as important as taro.
2. In 1993, *Phytophthora colocasiae,* the cause of taro leaf blight (TLB), destroyed taro cultivation in Samuatu. It is assumed that the spores were carried in on planting material illegally imported from Hawaii or American Samoa.
3. In response to Samuatu's global request for taro varieties resistant to TLB, varieties originally from Palifi were imported to Samuatu from Hawaii. (It was said that the Palifi germplasm had been taken to Hawaii without any authorization from Palifi.) With these varieties, Samuatu was able to resurrect its domestic market, although it has yet to achieve the levels of pre-TLB production. These same Palifi varieties are now being used in Samuatu breeding programmes in an attempt to produce a variety resistant to TLB but with the desired characteristics of the original Samuatuan taro.
4. At present, no taro is being exported but it is likely that an export variety will be produced in the breeding programme, and that this variety will have Palifi germplasm in its lineage. The breeding programme is being supported by donor funds as a component of a regional taro project.
5. Molecular marker technology has shown that taro from Palifi is significantly different from taro from the Polynesian part of the Pacific, such as Samuatu. The diversity in the Palifi genepool is greater and more resembles that of Papua New Guinea, which, like Palifi, has an easterly location and is therefore closer to Asia. Taro cultivated in Palifi could have originated from Asia or from Melanesia (for example, Papua New Guinea).
6. Samuatu and Palifi are Parties to the CBD but have not signed or ratified the IT. Both are members of PGR Networks that encourage the exchange of germplasm amongst members.

3. Each group works on the questions assigned to it as follows:

   Group A:
   As the Plant Genetic Resource Adviser for an inter-governmental organization based in a Pacific Island state called Balboa and working for the Pacific Island countries, what advice would you give for the best way forward in getting benefits back to Palifi for the use of its germplasm by Samuatu, and at the same time ensuring that Palifi continues to share its germplasm. What, if any, international and/or regional agreements are relevant and why? What, if any, national laws are relevant and why?

   Group B:
   As the Plant Genetic Resource Adviser for an inter-governmental organization based in Balboa and working for the Pacific Island countries, what steps would you take to ensure that this case does not have any negative impact on germplasm exchange within the Pacific?

   Group C:
   You are representing the Government of Palifi. There is some concern that the Palifi taro was taken from Palifi to Hawaii without any authorization from Palifi, and then taken to Samuatu and used by the growers there to enable them to grow taro again. What benefits do you expect from the Government of Samuatu and what assistance do you require from the regional Plant Genetic Resource Adviser? What is the relevance of any international, regional or national-level agreements and what makes each relevant (or not)?

   Group D:
   As the Plant Genetic Resource Adviser for an inter-governmental regional organization based in Balboa and working for the Pacific Island countries, what advice would you be giving to countries in the light of what happened (1) to Samuatu and their taro production and (2) to Palifi and the movement of their germplasm?

4. The rapporteurs compile the groups' inputs on the worksheets.

Phase 2. 'Trip around the tables' (45 minutes)

5. The rapporteurs begin their 'trip around the tables'. They have ten minutes to visit each table. They present their group's inputs and collect contributions to improve their list of responses. (30 minutes)
6. After visiting the three other tables, the rapporteurs return to their own group to share the contributions collected during the 'trip' and decide on the best answers. (10 minutes)
7. The rapporteurs write the results on the flipchart and prepare to present their group's results. (5 minutes)

Phase 3. Reporting and discussion (40 minutes)

8. The rapporteurs present the results to the audience. About five minutes are available for each presentation. (20 minutes)
9. The trainer invites the participants to participate in a brief discussion. (10 minutes)
10. The trainer distributes handout 1.A.10 to the participants, analysis practical considerations for this exercise, provides feedback on the context of the presentations and closes the session. (10 minutes)

Exercise 1A — Worksheet
Group A

As the Plant Genetic Resource Adviser for an inter-governmental organization based in Fiji and working for the Pacific Island countries, what advice would you give for the best way forward in getting benefits back to Palifi for the use of its germplasm by Samuatu, and . . .

. . . at the same time ensuring that Palifi continues to share its germplasm?

Exercise 1A — Worksheet
Group B

As the Plant Genetic Resource Adviser for an inter-governmental organization based in Fiji and working for the Pacific Island countries, how would you ensure that this case does not have any negative impact on germplasm exchange within the Pacific?

Exercise 1A — Worksheet
Group C

You are representing the Government of Palifi. There is some concern that (1) the Palifi taro was taken from Palifi to Hawaii without any authorization from Palifi, and then taken to Samuatu and used by the growers there to enable them to grow taro again. What benefits do you expect from the Government of Samuatu and what assistance do you require from the regional Plant Genetic Resource Adviser?

Exercise 1A — Worksheet
Group D

As the Plant Genetic Resource Adviser for an inter-governmental organization based in Fiji and working for the Pacific Island countries, what advice would you give to countries in the light of what happened (1) to Samuatu and their taro production, and…

. . . (2) to Palifi and the unauthorized movement of their germplasm?

Practical Considerations for Exercise 1A

(to be distributed after the exercise has been completed)

Germplasm exchange can often be complicated, especially with the multitude of legal and policy issues that exist. (1) Consider issues such as access without prior informed consent, benefit sharing, the importance of germplasm exchange and networking, and (2) with these in mind, arrive at an agreement that satisfies all parties and, at the same time, reinforces the importance of germplasm exchange.

General Considerations

When dealing with access or distribution of genetic resources, one has to determine what, if any, international legal instrument and corresponding national law applies.

The issues that have to be considered in all four questions:

- **Interdependence:** No country is predominantly independent in terms of PGRFA. All countries depend on others.
- **Limited diversity in the Pacific:** Recent phylogenetic studies on taro have provided evidence that the first settlers did not bring most cultivars from the Indo-Malaysian region. The cultivars were domesticated from wild sources existing in New Guinea and areas of Melanesia. However, domestication appears to have captured only a limited portion of the genetic diversity of the wild species. The majority of cultivars are therefore most likely clones derived from a narrow genetic base. The problem of low genetic diversity in crops of the Pacific is further exacerbated by vegetative propagation of taro.
- **Relevant international legal agreements and implementation:** Although many Pacific island countries are Parties to the CBD, none has developed an ABS legislative framework. Both Palifi and Samuatu in this example are signatories to the CBD but do not have any national legislation in place. Only the Marshall Islands have signed the IT.
- **Membership in Networks:** Many countries belong to networks that have their own fundamental agreements and rules. What networks do these countries belong to in the region? The trainer should be looking for the group to be asking this kind of question and inform the participants that both Samuatu and Palifi are active members of the regional PGR network, which promotes the sharing of germplasm.

Specific Comments:

Group A

Group A is asked to consider the options for getting benefits back to Palifi for the use of its germplasm by Samuatu, and what can be done to ensure that Palifi continues to share its germplasm. The group should therefore be clear in its answer about the importance of sharing germplasm to all involved and to be careful not to sacrifice that need in its quest for other benefits. Samuatu did not sign any agreement to acknowledge the source of the taro (Palifi) when they received the germplasm. There is a question about whether Hawaii

had the right to transfer this germplasm to Samuatu. We know from the example that Palifi did not authorize the transfer to Samuatu from Hawaii, but was this authorization even necessary? Was there a material transfer agreement used in the original transfer to Hawaii that might have relevant provisions? The United States is not a Party to the CBD and Hawaii is one of the federal states of the US. Were there any network agreements in place that might be applicable? These are some of the questions with which the group should be grappling.

In an attempt to promote germplasm sharing in the Pacific, Samuatu may see good reasons to address Palifi's concerns. Its taro cultivation was saved by this kind of exchange and the situation Samuatu found itself in with respect to taro leaf blight could occur in any of these countries. The trainer should look for the group to be exploring what Samuatu might do to encourage sharing by dealing with Palifi's concerns. For example, this could take the form of an official letter from the Government of Samuatu and also from the inter-governmental organization responsible for PGR. Samuatu could also consider establishing a form of bilateral agreement with Palifi now to ensure that any gains made from the commercial use of the Palifi taro will be shared with Palifi. Samuatu, through the regional taro project, can also guarantee that Palifi has priority when any taro from the Samuatuan breeding programme is distributed, and also possibly provide any training associated with the breeding of taro that Palifi might be interested in. The regional taro project could assist by providing funds to facilitate an evaluation of taro in Palifi.

Group B

This group is asked to try to mitigate any negative impact this case might have on the exchange of taro germplasm in the region. Group B might therefore explore how Samuatu might handle the case to ensure that Palifi's concerns are addressed through the points noted in the guidelines for Group A, above. The group might also consider how the network could actually use this case to illustrate that countries within the Pacific need each other: Samuatu used Palifi's germplasm in a breeding programme; Palifi had the germplasm but Samuatu had the breeding expertise. This case emphasizes the need for a regional approach to PGRFA. Farmers need to have diversity in their fields and not all rely on one variety. Because of the interdependent need for germplasm, there should be a system in place that supports exchange and ABS. The trainer should be looking for this kind of dialogue and perhaps even a discussion of the IT and why this instrument could be important to the countries in the Pacific.

Group C

This group is asked to represent Palifi and discuss how it might argue for benefits in this case. Palifi might, for example, expect acknowledgement (see notes from Group A) and also an agreement that Palau would be acknowledged in any papers, publications, etc. They may also look for germplasm from the breeding programme and technology transfer. Palifi would require the PGR Adviser to offer advice on the best way of achieving these 'benefits' and also how to ensure that this does not happen again.

Group D

Group D should consider the points raised above.