

**Table IV: How to proceed**

Excerpt from: Swiss Academies of Arts and Sciences (2016) Utilization of genetic resources and associated traditional knowledge in academic research. Swiss Academies Reports 11 (4), Bern, Switzerland, page 26 and 27.

Table IV suggests the necessary steps for the implementation of a research project utilizing genetic resources. It branches off depending on whether the user acquires the genetic resources from the field (*in-situ*) or from an institution or from a third person (*ex-situ*).

It focuses on academic research for non-commercial use. Nevertheless, it includes research and development for potential commercial use to illustrate the genetic resources value chain and changes of research intent.

Type of Research	Phase	ABS Requirements	Action	Recommendation		
Basic Research	Planning		Check at an early stage the ABS requirements of the targeted country for your planned research	Follow the scheme in Table II. Check also the conditions of the provider country regarding the exportation of your material.		
		Access <i>in-situ</i>	Define schedule and budget for the preparatory phase. Define options and budget for benefit-sharing, in order to discuss possibilities with your institution and to submit a funding request to the research funding agency, together with your project. Inquire about information to be submitted for PIC and modalities for negotiating MAT (focal point, internet).	ABS negotiations might take some time; additional funds might be needed. If there is more than one option regarding the location of the study area, choose a country in which you have established contact with the authorities and/or university institutes and/or choose a country that provides an organized ABS infrastructure and facilitated access for non-commercial research (e.g. Party to the Nagoya Protocol with ABS regulation in place).		
		Access <i>ex-situ</i> including acquisition from/ transfer through third persons	Inquire for the best way to obtain GR <i>ex-situ</i> for your project. Inquire if the utilization planned in your research is covered by the ABS conditions documented for the GR. If not, apply for new PIC and MAT from the provider country.	Follow Table III. If you obtain the resources from an intermediary (e.g. third person or <i>ex-situ</i> institution), ensure that the PIC and MAT of the original holder of the material, or the Material Transfer Agreement of the <i>ex-situ</i> facility allows the transfer of the material and your intended utilization.		
	Preparation of research	Prior Informed Consent (PIC)	Due Diligence	Field work (PIC and MAT)	Apply for PIC: submit the required information to the identified entry points and stakeholders of the provider country. According to the regulation of the provider country and your planned research, PIC may need to be obtained from: <ul style="list-style-type: none"> <li>– The Competent National Authorities;</li> <li>– The relevant stakeholders, such as indigenous and local communities;</li> <li>– Different levels of government (central State government, decentralised authorities, etc.).</li> </ul>	Apply for access as early as possible as the formalities may be time-consuming. Check whether you need to apply for other types of permits (exportation, research, access to protected areas ...).
				Mutually Agreed Terms (MAT)	After PIC is granted, negotiate MAT. Negotiate MAT with the ABS Competent National Authority. Comply to these terms throughout the research.	<ul style="list-style-type: none"> <li>– For elements and possible clauses to be included in MAT, refer to the Model Clauses at <a href="http://www.naturalsciences.ch/abs">www.naturalsciences.ch/abs</a>.</li> <li>– For ABS-negotiations, seek support from your institution's ABS officer, technology transfer unit or legal service department.</li> <li>– Document the application for PIC and all decisions regarding the granting of access to genetic resources and the MAT in written form. Store all data documenting the PIC and MAT processes also if there is no Due Diligence obligation.</li> </ul>
	Research	Benefit-sharing (BS)		Before starting your research acquire PIC and agree on MAT, including the benefits to be shared. Adhere to the agreed research plan; if this is not possible, renegotiate PIC and MAT. Respect local and national laws and regulations. Respect the customs, traditions, values and customary practices of indigenous and local communities. Respect the principles of conservation and sustainable use of biological resources.	For a list of possible benefits arising in the context of academic research, refer to Appendix III.	
				Cooperate with local researchers, research institutions. Engage local research assistants.	A large part of the sharing of benefits may have to be carried out during the research itself. It might be necessary to carefully explain that academic research does not lead to economic benefits in most cases.	
	Results and Benefit-sharing			Share the results with stakeholders of the providing country. Respond to requests for information from local people; communities, institutions. Make documentation of the research findings available to the ABS authority (and other interested agencies) of the provider country; Provide your research partners with access to the research findings.		
	Continuation of research			If you transfer resources to a third party, verify that this is covered by PIC and that the conditions of the initial MAT are known by the recipient. If you transfer rights or processed research material to another institution, ensure that this transfer is covered by the issued PIC and that the specified conditions (MAT) are met. Pass on the documentation on PIC and MAT to the subsequent user.		

Research and Development	Preparation		Access <i>ex-situ</i> including acquisition from/transfer through third persons	Inquire for the best way to obtain GR from <i>ex-situ</i> for your project. Inquire if your planned research is covered by the ABS conditions related to the resource. If not, apply for new PIC and MAT from the provider.	Follow the scheme in Table III.  If you obtain the resources from an intermediary, ensure that the PIC of the original holder of the material covers the transfer of the resource and your planned research intent.
			PIC and MAT for academic research are frequently issued for basic research only. Therefore in case of R&D for a potential commercial product, as a rule, new PIC and MAT have to be applied for in the initial provider country.	The MAT need to include agreements on Intellectual Property Rights and on monetary benefit sharing.	
	Research	Seek research and development cooperation with the provider country. Respect any restrictions or limitations on the use of the genetic resources as defined by the provider(s). If your findings lead to essential changes in the project, obtain new consent (PIC and MAT).			
	Results and BS		Share any economic and/or academic benefits resulting from the valorization of the research findings.	When applying for a patent in Switzerland, you need to disclose the source of your GR and ATK. Economic benefits may e.g. result from license fees.	
Commercialization			Access <i>ex-situ</i> or from third parties	Check whether in PIC and MAT include a potential commercialization of the product is included. If not you need to have a new PIC and negotiate MAT.	There are different triggers to flag "commercialization" (Patenting; applying for market permits ...). The trigger chosen by your provider country needs to be specified in the MAT.
				Promote participation of the providers of the genetic resource in the product development. If possible, develop products in the provider country.	
				Concurrently apply for market admission or commercialization, and notify your Due Diligence compliance to the Swiss Federal Office for the Environment.	
				Share monetary (and non-monetary) benefits according to the MAT.	