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***Access to Genetic Resources and Sharing the Benefits of
Their Use in Canada:
Opportunities for a New Policy Direction***

Discussion Paper

Canada 

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What Are Genetic Resources ?

Most people know about natural, biological, resources like the timber we get from trees or the grain we get from crops. A lot of people are unaware of another kind of valuable resource we get from the natural world, genetic resources. Genetic resources are described as any plant, animal, or microbial material that contains functioning genes that could be of actual or potential value. Genetic resources can be found in nature or in collections, botanical gardens, etc. One way to think about a genetic resource is that it is different than a biological resource because of the way you use it. If you use the genes then you are using a genetic resource.

Possible uses of genetic resources.

1) Genetic modification

Development of new varieties of organisms

Transfer of a gene for pesticide resistance from one organism into another;

- Genetic modification of a micro-organism to produce enzymes or biofuels;

2) Biosynthesis

Use of genetic material as a "factory" to produce organic compounds, such as:

- Antibodies; Vitamins; Hormones; Enzymes; or drugs

3) Breeding and selection

Creating new varieties, breeds, or strains of plants or animals

4) Growing and cultivating the genetic resource in the form received

5) Conservation

Preserving organisms for conservation of genetic diversity, genetic resources or reintroduction purposes
Captive breeding programmes,

- Deposition in seedbanks, genebanks, culture collections, botanical gardens, zoos, and aquaria etc.

6) Characterization and evaluation

- Characterising plants, animals and micro-organisms for ecological and other studies and purposes
- Collections of reference specimens in museums and herbaria

7) Production of naturally occurring compounds

- Screening and extraction of metabolites from genetic material
- Chemical synthesis of metabolites occurring in genetic material

Research using genetic resources gives rise to a range of benefits, such as increased knowledge of our plants, animals and other organisms and a better understanding of how to use and conserve our biological diversity. In some instances, research on genetic resources also gives rise to important economic and social benefits – for example, in the breeding of crop plants to face new environmental challenges or the development of new drugs and medicines. It is important to understand that the benefits which come from

the use of genetic resources are broad, and can include monetary payments as well as non-monetary benefits such as sharing new knowledge, scientific research and technologies.

What is Access and Benefit Sharing (ABS)?

‘Access’ means how someone gets to use a genetic resource that they do not own, for example a scientist seeking the permission of a government department to collect samples on Crown Land. In this case, the scientist is gaining access to a genetic resource by getting permission from the Crown to collect samples from their land.

Benefit sharing means how, if a genetic resource is used as described above, the provider and the user of the genetic resource share the benefits arising from the use of the genetic resource. For instance, in the example mentioned above, if the scientist finds that a plant they accessed is rare, or produces a good chemical product, then there are benefits in knowing more about the plant, or from the production and sale of the chemical.

A third part in Access and Benefit Sharing is referred to as mutually agreed terms. This means that the person who gives permission to access, and the person who wants permission to collect must both agree to the “terms” under which collection can take place as well as agreeing to the terms for sharing benefits from any research done with the genetic resource. The government department responsible might agree that there is benefit in increased scientific knowledge about a particular plant. In this case the benefit from the use of the genetic resource (increased scientific knowledge of a particular plant) is shared through the publication of the scientist’s research, and the increased knowledge which comes from it. The boxes below provide some examples of how this could work.

How ABS could work:

Example 1

A researcher for a drug company wants to collect some microorganisms from a hot spring on federal Crown Land to see if those microorganisms might be a source of a new medicine.

The researcher contacts the government department that manages the land to seek permission to access the genetic resource (i.e. microorganism samples).

The researcher and the federal government department in charge of the land come to an agreement on what the genetic resource is to be used for, how the sampling is to be conducted, and how the benefits which could come from this research (for example, a new medicine) could be shared.

There could be a number of ways in which this happens – the generation of new knowledge, the development of new medicines to help cure illnesses, or, in some cases, an agreement to share some of the economic benefits which could come from commercializing a new medicine.

In this example, the *access* happens when the Federal government allows the researcher access to the GR, and the *benefit sharing* happens through the agreement between the researcher and the federal government to share the benefits from the use of that GR.

Example 2:

A researcher wants to study a particular plant which grows in the Canadian north. The researcher believes that knowing more about the genetic properties of this plant will help us to come up with better ways to protect that plant.

The researcher contacts the government ministry responsible for granting access to that land. The researcher and the government department agree that the researcher can collect a certain amount of the plant. They also agree on how that genetic resource can be used (i.e. for research purposes). The researcher and the government department agree that the benefits from this research will be that knowing more about this plant will help to come up with a better way to protect that plant and that the researcher will provide their findings to the government department to help in their conservation efforts.

In this scenario, the *access* happens when the researcher is granted permission by the government department to collect samples of the plant. The *benefit* which arises from the use of that genetic resource (i.e. the genes of the plant) is the information which helps the government department in better understanding how they can protect that plant. The *sharing of the benefits* happens when the researcher and the government mutually agree that the researcher will provide their research findings to the government department.

Example 3:

A researcher from a chemical company thinks that they might be able to develop a new kind of glue from enzymes produced by a certain kind of clam which grows in Canadian waters. They think that this new kind of glue could be turned into a commercial product which would benefit their company.

The researcher gets permission to access the genetic resource (the clam's enzyme) from the government department responsible for the waters in which the clam is found. The researcher and the government department agree on what the benefits which could come out of this access would be, and how they would be shared. For instance, they could agree that if the glue that the researcher develops does become a commercial product, the company would share a small part of this economic benefit with the government department which provided access to the genetic resource.

In this scenario the *access* happens when the researcher gets permission to access the clam they want to get an enzyme from. The *benefit sharing* happens when the two parties develop mutually agreed terms on how the benefits from the use of that genetic resource could be shared – in this case, it could be through a small monetary payment if a commercial product is developed based on the genetic resource.

Frequently, the economic and social benefits of research using genetic resources (for instance in the development of new medicines) can only be realized through cooperation between providers and users of genetic resources. In light of this, the Convention on Biological Diversity calls for countries to establish conditions to facilitate access to genetic resources, to ensure that it is based on the informed consent of the provider country before access takes place, and that access is granted on terms mutually agreed by the

provider and the user countries. Policies which deal with access to genetic resources and the sharing of the benefits which arise from their use are usually called access and benefit sharing policies, or ABS.

In 2002, the Convention on Biological Diversity adopted the *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization*, as voluntary guidance to countries in developing their domestic Access and Benefit Sharing policies. The *Bonn Guidelines* also introduced a direct link between genetic resources and the traditional knowledge of Aboriginal and local communities which is related to those genetic resources.

Many countries, such as Australia, South Africa and India have established domestic policies on access to genetic resources and sharing benefits arising from their use, and many others are in the process of developing their domestic policies. More than 100 countries have ratified the *International Treaty on Plant Genetic Resources for Food and Agriculture*, which includes an ABS regime for specified genetic resources for food and agricultural uses. In addition there is ongoing work under the Convention on Biological Diversity to develop an international regime on Access to Genetic Resources and Benefit Sharing for Genetic Resources by 2010.

More information

The links below will provide more information on ABS in general, including information on how some other countries have approached the issue. These links are provided for information purposes only.

Convention on Biological Diversity, information on ABS:

<http://www.cbd.int/abs>

Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (the Bonn Guidelines):

<http://www.cbd.int/abs/bonn.shtml>

International Treaty on Plant Genetic Resources for Food and Agriculture:

<http://www.planttreaty.org/>

Quebec Department of Environment:

<http://www.mddep.gouv.qc.ca/biodiversite/APA/index.htm> (in French)

Canadian ABS Portal:

<http://www.ec.gc.ca/apa-abs/>

ABS in other countries:

Australia :

<http://www.environment.gov.au/biodiversity/science/access/index.html>

Australian State of Tasmania :

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/HBAW-7NH76A?open>

European Community:

<http://abs.eea.europa.eu/>

New Zealand:

http://www.med.govt.nz/templates/StandardSummary_46.aspx

United Kingdom:

<http://www.defra.gov.uk/science/geneticresources/>

Sweden:

<http://www.biodiv.se/eng/abs/>

Purpose of this paper:

We want to hear your views on how Canada should best promote access to genetic resources in Canada and the fair and equitable sharing of the benefits gained from their use. This is the first step in a process of seeking your views, and should not be considered a formal consultation.

HOW TO SUBMIT YOUR VIEWS

Feedback is essential to this process. We want to hear the views of you and your organization on the options and ideas presented in this document either online, by fax or by traditional mail.

Online:

Use the form provided at http://www.ec.gc.ca/apa-abs/developpement-development/sondage_survey.cfm?lang=eng to provide your views.

Fax or Traditional Mail:

You may prefer to send your response by fax or traditional mail. If so, you can download the form and provide written responses to the questions, and/or your general comments. Please complete, and mail to:

Access and Benefit-Sharing
Environment Canada
Ecosystems and Biodiversity Priorities
Place-Vincent-Massey, 12th Floor
351 Blvd. St-Joseph
Gatineau, Qc.
K1A 0H3
Fax: (819) 953-1765
Email: apa-abs@ec.gc.ca

Why ABS is important for Canada:

Many Canadians are unaware that our country is a source of genetic resources that have potential or real value - especially from the boreal forests and extreme environments such as the deep sea, hot springs and the Arctic. Canada is also the source of new genetic resources generated by Canadian science and technology. Canadians (such as researchers at Canadian universities) use genetic resources from both Canada and from other countries in their research and as an input for product innovation.

How we manage access to Canadian genetic resources and the sharing of the benefits arising from their use is a challenge that touches on important goals of Canadians – conserving biodiversity, increasing our scientific knowledge, as well as supporting research and innovation in biodiversity and biotechnology. It also touches on some of our most important economic sectors – such as agriculture, forestry, fishing, biotechnology, and health care. The development of international and domestic ABS policies will be of interest to people and groups in regions across Canada, from a number of sectors. For example, scientists

from Canada and other countries have already started to ask how they can gain access to genetic resources in diverse Canadian environments such as the Arctic and hot springs.

How we manage our genetic resources now:

There are currently some practices, laws and regulations in place that affect access to genetic resources and the arrangements for sharing benefits resulting from the use of those genetic resources. For example:

- access to and collection of biological resources in national parks and other protected areas are often governed by permitting systems;
- sometimes there is a contractual agreement between a scientist and a landowner for collection of specimens on the landowner's property, or
- agreements to transfer material between academic institutions, researchers and private business

At this time, various industry sectors also have policies or practices in place that address elements of an access and benefit sharing regime, and in those cases ABS is mostly governed by the policies and practices of the institutions directly involved or by day-to-day practices. In addition the legally binding *International Treaty on Plant Genetic Resources for Food and Agriculture*, developed by national governments at the United Nations Food and Agriculture Organization governs ABS in some segments of Canada's food and agricultural sector

Between 2004 and 2006, the federal government held a series of workshops on ABS involving several groups in different regions of the country. Workshops were held with governments, Aboriginal and local communities in the North; representatives from the science and technology sectors; and stakeholders in the forestry and agriculture sectors. Reports from these workshops can be found in the Canadian ABS Portal (<http://www.ec.gc.ca/apa-abs/documents/default.cfm?lang=eng>).

In 2005, federal, provincial and territorial governments agreed on the following policy objectives and core principles to guide Canadian approaches to managing genetic resources. These principles are:

- *Environment-focused* - contributing to the conservation and sustainable use of biodiversity;
- *Practical and Economically Supportive* - generating and sharing economic benefits of the utilization of genetic resources among both providers and users as a means of contributing to sustainable development;
- *Simple, Efficient and Adaptable* - taking into account different sectors and allowing for different approaches in different jurisdictions;
- *Supportive of current governmental policies*, and building on and respecting Canada's existing international commitments;
- *Balanced, equitable and transparent* - balancing responsibilities between users and providers of genetic resources in a manner that is clear and whose rationale makes sense to all concerned; and
- *Inclusive*, developed and implemented with the appropriate involvement of Aboriginal groups and communities.

Current activities and next steps:

Canadian federal, provincial and territorial governments are currently considering how they can work together to realize the important benefits that genetic resources hold, and how the benefits from the use of genetic resources could be shared fairly and equitably. An additional consideration is how ABS policy in Canada could accommodate the traditional knowledge associated with genetic resources held by

Aboriginal and local communities, which can advance the understanding of their properties, uses and importance.

In 2008, a Federal/Provincial/Territorial Task Group was established to examine the issue of ABS policy in Canada and to develop options for consideration by Canadians. The Task Group is being led by Environment Canada, with guidance from the Canadian Council of Resource Ministers.

Even though the process is still at an early stage, federal, provincial and territorial governments recognize that the views of Canadians on how to address access to Canadian genetic resources, how to share the benefits arising from their use, what sort of policy should be developed, and how such a policy would affect them are central to any decision on ABS policy in Canada.

This Discussion Paper identifies a range of options for ABS policy in Canada, and how policy might be implemented. Before beginning the process of identifying how ABS policy in Canada should proceed, we need your views on these options for ABS policy in Canada but also on any other options you think need to be considered. This is a very important part of the process, as the views heard from Canadians at this stage will assist in the development of a recommended policy option for the consideration of Ministers.

Process:

We will seek the views of Canadians in two ways:

- Web and mail based process: We are inviting comments from any Canadian individuals and organizations interested in the future of how Canada manages access to and benefit sharing from the use of its genetic resources through a web site hosted by Environment Canada (see the information provided on page 7 for more information to see how you can participate). We expect to hear from Aboriginal peoples, academic researchers and scientists, representatives from industries that rely on biological and genetic resources for example biotechnology, forestry, agriculture, pharmaceutical, fisheries and aquaculture, as well as representatives from community groups and other non-governmental organizations (NGOs).
- Face to face process: We will hold a workshop with some stakeholders to explore the issues in more detail. In addition, we will also hold a series of in-person meetings with representatives of national and regional Aboriginal organizations across the country and with Aboriginal peoples party to comprehensive land claims agreements and/or self-government agreements.

To help with your feedback on an ABS policy in Canada three broad questions are posed:

- *What should the approach be to ABS policy in Canada?*
- *What are the choices for implementing ABS policy in Canada?*
- *Should traditional knowledge associated with genetic resources be addressed within ABS policy in Canada? If so, how should it be addressed?*

Glossary and Key Concepts

The following terms are ones which appear throughout the text. The descriptions provided here are meant to provide a quick, general reference guide as to what these mean in the context of ABS policy in Canada, and do not necessarily represent formal, legal definitions of these terms.

Core elements:

The elements of an ABS policy which would be common across all the different possible approaches – prior informed consent – PIC - and mutually agreed terms (including benefit sharing agreements/arrangements) - MAT.

Facilitated access:

Expresses the concept that any ABS system that is developed should be designed in a way that makes the rules for accessing genetic resources as clear and simple as possible, and that avoids placing too much of a burden on those seeking access.

Genetic Resources:

Genetic material of actual or potential value, which includes any material of plant, animal, microbial or other origin containing functional units of heredity. Genetic resources contain genes that can be inherited or moved into other organisms, such as plants, animals, fungi, viruses and bacteria.

Mutually Agreed Terms including benefit sharing agreements or arrangements (MAT)

Terms, approved by the provider and the user of genetic resources, which lay out how the access to the genetic resource can take place, and how the benefits which may result from the use of genetic resources are shared. For example, mutually agreed terms may include, among other things, the type and quantity of genetic resources which can be collected, or limitations on the possible use of the material (e.g. for research purposes only). Benefits can be broad and multi-layered, and include monetary payments as well as non-monetary benefits such as sharing new knowledge and technologies.

Prior Informed Consent (PIC)

Measures to ensure that both the provider and the user know what is being accessed and why before consent to access is given, and before that access takes place.

Traditional Knowledge Associated with genetic resources

The knowledge, innovations and practices of Aboriginal communities that are associated with the use of genetic resources, which are held in common, in confidence and are not in the public domain.

Issue 1: Developing ABS Policy in Canada

Question: *What should the approach be to ABS policy in Canada?*

Any ABS policy in Canada must take into account the sharing of powers under Canada's Constitution for the use of lands and their natural resources. In general:

- The federal government has authority over the genetic resources found on federal crown lands and waters, or in federal government possession off site (e.g. plant material held in a federal plant research centre).
- Provinces and territories have authority over public lands within their area of authority (or jurisdiction) and associated natural resources, including genetic resources. They are also responsible for most kinds of property law, including laws governing access to privately-owned lands.
- In certain cases, those Aboriginal peoples party to self-government agreements and comprehensive land claim agreements may have authority in those agreements over the granting of access to lands and resources under their jurisdiction. Aboriginal groups may also have rights that can be exercised on Crown lands.

Adding to this complexity is the fact that provinces and territories face very real differences in terms of their economic sectors, resource management legislation and land ownership patterns. For example, in many parts of the country private land accounts for less than 10% of the total area of a province or territory while the level is 50% or more in some Atlantic provinces. The constitutional framework of Canada also recognizes and affirms existing Aboriginal and treaty rights pursuant to section 35 of the *Constitution Act, 1982*.

All of these constitutional, legislative, social, cultural and economic factors which shape the various jurisdictions in Canada must be addressed when developing effective ABS policy in Canada.

Possible Approaches

The Task Group identified three possible ways that ABS policy in Canada could be approached:

Option 1. Nationally consistent approach

Under this approach, federal, provincial and territorial governments would work together to develop a national ABS policy based on common principles and core elements. Jurisdictions would tailor implementation to address their own circumstances, but would try to ensure consistency among their approaches wherever possible. Those sectors that have already developed and are practicing their own ABS systems would be able to maintain their existing practices under the national approach, provided they meet the core principles agreed to by the jurisdictions.

It has been suggested that this approach could help build common approaches to the core elements (see Glossary) of ABS policy in Canada. In cases where genetic resources are shared across jurisdictions, it could discourage users from seeking to access genetic resources within a jurisdiction where the policy is either absent or relatively undeveloped. As well, increased legal certainty for both users and providers of genetic resources could attract more scientific research and thus generate greater benefits for Canada and Canadians.

At the same time, others have noted that a coordinated approach could require a significant investment of effort and time to get the approval of the various implementing jurisdictions and there is a risk that some practices which already exist in some sectors may have to be modified.

Option 2. Independent approach for each jurisdiction

Under this approach, ABS policies would be developed independently in each jurisdiction without any formal attempt to coordinate common principles and core elements. Jurisdictions would also have the option of not developing an ABS policy at all and continuing with the status quo.

It has been suggested that this approach could better enable provinces and territories to adopt ABS policies and implement approaches that best fit their specific needs. It also could allow implementation of ABS measures to move at a faster pace than coordinating ABS policy in Canada with a number of jurisdictions.

On the other hand, this approach could generate a patchwork of inconsistent policies which could result in confusion about the different rules which apply to ABS in different places in Canada. It also could lead to duplication of effort among jurisdictions in terms of developing the tools and skills needed to administer ABS policy in Canada.

Option 3. Single national approach developed by the federal government

Under this approach, the federal government would develop a single ABS policy for Canada.

It has been suggested that this approach could make implementation of ABS measures simpler, because there would be just one jurisdiction (the federal government) which would be developing the policy for other jurisdictions to adopt. It also could increase legal certainty about the use of genetic resources for both users and providers of genetic resources, which could encourage further investments in conservation and building scientific knowledge of biodiversity.

However, because of the way powers are shared in Canada, this approach could result in an inefficient and limited national policy, as provinces and territories could choose not to participate. It could also be difficult to adapt and administer a single national approach to the different circumstances in different provinces and territories as well as for different sectors and sub-sectors.

What do you think?

We want to hear your views on how ABS policy in Canada should be approached:

- *Are there specific things you like about each of these approaches? Do you have concerns about any of them?*
- *How do you think each of these approaches would affect you, your community, your organization or your industry sector?*
- *Can you think of any other approaches that need to be considered?*

Issue 2: Implementing ABS Policy in Canada

Question: *What are the choices for implementing ABS policy in Canada?*

Regardless of whether ABS policy in Canada is coordinated at a national level or made up of independent approaches in various jurisdictions, there will be a need for processes and measures to implement the policies – legislation, regulations, guidelines and voluntary tools (such as codes of conduct and/or administrative procedures).

There is therefore a need to consider to what extent it will be possible to apply existing tools readily at hand – particularly laws and regulations relating to property and resource management – to the case of genetic resources. For example, ABS policy in Canada may be able to take advantage of existing laws and regulations pertaining to property, trespass, theft and contracts.

Possible Approaches

The Federal/Provincial/Territorial Task Group identified three approaches for consideration with respect to how ABS policy in Canada could be implemented:

Option 1. Create new voluntary and non-regulatory measures to complement existing processes, laws and practices

Under this approach, ABS policy in Canada would be implemented using existing laws in such relevant areas as contract law and property law. The approach would build on current mechanisms, practices and international agreements for access and benefit sharing that are being used, such as in the agriculture and agri-food sectors, and the transfer of technology between researchers and industry. No new laws or regulations would be developed.

Implementation would be supported through current and new non-regulatory tools and voluntary measures such as awareness-raising, educational resources, guidelines and codes of conduct. Core elements relating to prior informed consent to access genetic resources and the sharing of benefits arising from their use, would be addressed through these voluntary measures.

It has been suggested that this approach could be the simplest one to develop, and could require less work to implement than the other options considered. There are good examples of guidelines and codes of conduct developed by other countries or other organizations which Canada could adapt. In addition, this approach would mean that existing practices that currently apply to elements of access and benefit sharing in certain sectors could continue unchanged.

Others have questioned the effectiveness of relying only on voluntary measures such as codes of conduct and guidelines, given the relatively low level of awareness of ABS issues, even among users of genetic resources. As well, such an approach may not bring any additional legal certainty for users and providers of genetic resources, or provide a firm guarantee that the core elements of ABS policy in Canada would be adequately addressed.

Option 2. Create new regulatory and non-regulatory measures to complement existing processes, laws and practices

Under this approach, the focus would remain on using existing laws, regulations and non-regulatory measures where possible (as in approach 1 above), and implementation would be supported through current and newly developed non-regulatory tools and voluntary measures. However, in addition, legislation and regulations would be amended to specifically address genetic resources where gaps are identified. For example, existing permitting systems regulating access to land and biological resources could be amended to specifically address access to and collection of genetic resources and the sharing of benefits resulting from their use. An example of existing regulation or regulation pertaining to access to genetic resources would be those pertaining to research permits for accessing plants in protected areas.

It has been suggested that this approach could help speed implementation of ABS measures across Canada, when compared with the third option outlined below, given that this approach would take less time than developing and enacting new ABS-specific rules.

At the same time, some feel that it could actually involve greater complexity, and thus could take longer to implement than the third option, due to additional administrative burden in amending regulations. Some also question whether or not existing mechanisms, which were developed to regulate access to other natural resources, are really well designed to regulate access to genetic resources or the sharing of benefits arising from their use.

Option 3. Create new ABS-specific legislation and regulations

Under this approach, new ABS-specific legislation and regulations would be developed at the federal level and/or the provincial and territorial levels. Specific legislation and regulations would establish requirements for obtaining prior informed consent for access to genetic resources and for negotiating the terms of use and the arrangements for the sharing of benefits resulting from the use of genetic resources.

It has been suggested that this approach could bring a consistency of application of ABS policy in Canada. This would help ensure legal certainty to users and providers of genetic resources in Canada, as it would create clear rules which have to be followed when accessing genetic resources and sharing the benefits from their use.

Others have noted that it could take several years before new legislation is in place and implemented, increasing the risk that existing gaps in laws and regulations relating to the access to genetic resources and benefit sharing would remain in the meantime. The costs of developing, maintaining and enforcing any new legislation also could outweigh, at least in the short term, any benefits from increased access to genetic resources. This new legislation could create duplication with existing legal requirements in some provinces or territories.

What do you think?

We want to hear your views on how ABS policy in Canada should be implemented:

- *Are there specific things you like about each of these approaches? Do you have concerns about any of them?*
- *How do you think each of these approaches would affect you, your community, your organization or*

your industry sector?

➤ *Can you think of any other approaches that need to be considered?*

Issue 3: Traditional Knowledge Associated with Genetic Resources

Question: *Should traditional knowledge associated with genetic resources be addressed by ABS policy in Canada?*

Another aspect of ABS policy in Canada is that it could address the traditional knowledge associated with genetic resources which is held by Aboriginal communities. Just as genetic resources are recognized as having important economic and social benefits – for example, the development of new medicines – the traditional knowledge of genetic resources and their uses may also be of value to new users. Such knowledge, gained over generations of experience, could include, for example, knowledge of the use of a particular plant as a medicine, or knowledge of the properties of another plant that would suggest potential for a new industrial application. If there is a decision to share this traditional knowledge associated with genetic resources, it could advance the understanding of the uses and importance of genetic resources in many areas, including research and conservation. Therefore, any ABS policy in Canada must consider whether this traditional knowledge associated with genetic resources should be included, and if so, how it should be addressed.

For the purposes of ABS policy in Canada, the term traditional knowledge associated with genetic resources is understood to be the knowledge, innovations and practices of Aboriginal peoples associated with the use of genetic resources which is held by communities in common, in confidence, and is not already in the public domain. The scope of ABS policy in Canada is not intended to include broader traditional knowledge issues already in or beyond the scope of the Convention on Biological Diversity, for example, cultural property and intellectual property rights.

There is no obligation under the Convention on Biological Diversity to include traditional knowledge in an ABS policy. However, the *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization*, which were developed as a voluntary guide for countries on developing domestic ABS policy, includes traditional knowledge associated with genetic resources within its scope. Many other countries with ABS laws have included provisions pertaining to traditional knowledge associated with genetic resources, and it is part of the ongoing discussions about an international regime on ABS.

Authority to grant access to traditional knowledge associated with genetic resources is a complex issue for both users and for Aboriginal peoples. If it was determined that traditional knowledge associated with genetic resources was included in ABS policy in Canada, it would require significant resources to establish a mechanism that would be transparent and equitable.

If traditional knowledge associated with genetic resources was not included in ABS policy in Canada, there would be no new measures taken, but Aboriginal people could continue to use existing practices, such as contract law, to negotiate arrangements with users who wish to access associated traditional knowledge. It has also been suggested that excluding traditional knowledge associated with genetic resources from the scope of ABS policy in Canada could simplify the development and implementation of policy governing only genetic resources.

What do you think?

We want to hear your views on how ABS policy in Canada should address traditional knowledge associated with genetic resources:

- *Should traditional knowledge associated with genetic resources be included as an element under an ABS policy in Canada*

Question: *If it is decided that ABS policy in Canada should address traditional knowledge associated with genetic resources, how should it be addressed?*

Possible Approaches

The Task Group identified three potential approaches to how traditional knowledge could be addressed by ABS policy in Canada. We want to hear your views on these, and on any other approaches which could be considered.

Option 1: Traditional knowledge associated with genetic resources is addressed through voluntary mechanisms and tools

This approach would see traditional knowledge associated with genetic resources addressed through a variety of non-regulatory and voluntary measures, such as voluntary guidelines and best practices, awareness-raising, education campaigns, and other tools (such as model contracts and confidentiality agreements). Voluntary guidance could assist users to access traditional knowledge associated with genetic resources and to negotiate benefit sharing through mutually-agreed terms.

Holders of traditional knowledge associated with genetic resources who choose to share their knowledge and who want to share the benefits arising from that use could consider formal contractual arrangements with those parties wanting access to that knowledge.

It has been suggested that this approach could allow for more streamlined ABS policy in Canada, and for quicker implementation, given that it would require no new rules, or changes to existing ones.

At the same time, this approach might not guarantee the level of legal certainty sought by some providers and users of genetic resources and/or traditional knowledge associated with genetic resources.

Option 2: Traditional knowledge associated with genetic resources is addressed through existing regulatory measures supported by new regulatory and voluntary measures

Under this approach, traditional knowledge associated with genetic resources would be formally addressed when users and providers of genetic resources are developing arrangements regarding access to those genetic resources and the sharing of benefits arising from their use. Any obligations under these arrangements would be dealt with through the existing and new regulatory mechanisms developed to implement prior informed consent, mutually agreed terms and benefit sharing for genetic resources.

In this option, a user of genetic resources could be required to indicate if they accessed traditional knowledge associated with genetic resources which is not already in the public domain, or if they expect to access it after they have accessed a particular genetic resource. Where they have indicated that they have accessed traditional knowledge associated with genetic resources, the users of the genetic resource would need to demonstrate that they have negotiated for the prior informed consent of the provider of the traditional knowledge associated with genetic resources. They would also have to show that they have negotiated arrangements for the use of that traditional knowledge, and for sharing the benefits which might arise from that use.

It has been suggested that this approach better acknowledges the value that traditional knowledge associated with genetic resources can provide to the access and use of genetic resources. This approach could provide security to those holders of traditional knowledge associated with genetic resources who are considering sharing the knowledge but are concerned about how that knowledge might eventually be used.

At the same time, there are some who feel that this approach could also require significant administrative work to change existing mechanisms, and could be complicated and demanding to implement, and would not be easily implemented for private land or resources.

Option 3. Traditional knowledge associated with genetic resources addressed by new ABS-specific legislation and regulations

Under this approach, traditional knowledge associated with genetic resources would be included within new ABS-specific legislation and regulations developed at the federal level and/or the provincial and territorial levels. These new mechanisms would include requirements for obtaining prior informed consent for access to traditional knowledge associated with genetic resources and for negotiating how it would be used, as well as how the benefits from that use would be shared.

It has been suggested that this approach could bring consistency of application of a policy and help ensure legal certainty for users and providers of traditional knowledge associated with genetic resources in Canada, and would promote the sharing of benefits from their use with Canadians.

However, the complexity and time for developing, maintaining and enforcing any new ABS legislation that also included traditional knowledge associated with genetic resources would likely be significantly greater than ABS legislation limited only to genetic resources.

What do you think?

We want to hear your views on how ABS policy in Canada should address traditional knowledge associated with genetic resources:

- *Are there specific things you like about each of these approaches? Do you have concerns about any of them?*
- *How do you think each of these approaches would affect you, your community, your organization or your industry sector?*
- *Can you think of any other approaches that need to be considered?*

Incorporating your responses into the decision making processes:

We need to hear what you think about ABS policy in Canada. We have included specific questions for your consideration throughout the document. In addition to the specific questions on the options presented, you may wish to consider:

- *Do you have any general comments about ABS you would like the Task Group to consider?*
- *Do you have any general comments about this process that you would like to share with the Task Group?*
- *Are you aware of existing ABS practices? Do you use them? Are they effective? Why or why not? What are the gaps?*

These questions have been outlined clearly on a website for you to complete. You can also participate through a traditional mail system (instructions outlined in the box below).

Your ideas and feedback on the issues and questions outlined in this Discussion Paper will be of direct assistance as governments in Canada continue to work together to address the challenges of access and benefit sharing of genetic resources. The Federal/Provincial/Territorial Task Group will review the comments, suggestions and concerns they receive through this engagement process. The output from the engagement process will be provided to governments, and is proposed to be discussed at a possible meeting of Federal/Provincial/Territorial; Ministers in the fall of 2009.

Any decision on ABS policy in Canada will take into account the views of interested individuals, organizations and Aboriginal groups. If Ministers decide to proceed with ABS policy in Canada, further discussions on the proposed option(s) could be held at that point.

HOW TO SUBMIT YOUR VIEWS

Feedback is essential to this process. We want to hear the views of you and your organization on the options and ideas presented in this document either online, by fax, or by traditional mail.

Online:

Use the form provided at http://www.ec.gc.ca/apa-abs/developpement-development/sondage_survey.cfm?lang=eng to submit your views.

Fax or Traditional Mail:

You may prefer to send your response by fax or by traditional mail. If so, you can download the form and provide written responses to the questions, and/or your general comments. Please complete, and mail to:

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