Access and Benefit Sharing Laws in South Asia









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Enforcement, Implementation and Monitoring Challenges

It is crucial for South Asian countries to address the legal and institutional concerns associated with access to genetic resources and sharing of the benefits arising out of the use of such resources.

■ Robert J. Lewis-Lettington



Access to genetic resources and sharing of the benefits arising out of their use are a complex, and sometimes controversial, concept. When the usefulness of this concept to agriculture became part of economic development thinking as far back as the 1960s, discussions on issues surrounding genetic resources began in forums such as the Food and Agriculture Organization of the United Nations (FAO). The temperature of such discourse increased significantly in the 1980s, as the science of modern biotechnologies advanced rapidly in a number of areas and created a wide array of new, commercially significant uses for genetic resources. In the present context, the international legal framework for access and benefit sharing (ABS) consists of two closely related instruments: the Convention on Biological Diversity (CBD), 1992 and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), 2001. The possibility of a third instrument, an agreement on farm animal genetic resources, is being widely mooted and a potentially more detailed interpretation of the CBD's access provisions is under consideration in the context of discussions for an international regime on ABS. This research brief has been prepared to highlight the basic structures for ABS established by the CBD and the ITPGRFA, and to identify some of the key enforcement, implementation and monitoring challenges associated with such ASB structures for South Asian countries. The brief aims to assist South Asian countries in finalizing the access instruments that most of them are currently considering in draft form and, at a minimum, to assist stakeholders with an interest in ABS issues in contributing to the shaping of the implementation of their national systems.

The CBD provides the foundational provisions of contemporary understandings of ABS and the ITPGRFA provides a sector-specific interpretation of these foundational provisions for crop-based agriculture.



Basic international legal framework

The CBD makes the sustainable use of biodiversity, including genetic resources, and the fair and equitable sharing of benefits from that use two of its key pillars. Through its Article 15, the CBD then follows up with a basic framework of principles for ABS. The underlying assumption is that the realization of the commercial value of genetic resources will increase awareness of the potential value of biodiversity conservation. In short, it is a market-oriented approach to promoting conservation.

The basic link between the CBD and the ITPGRFA was established after the Nairobi Declaration recognized that issues of *ex situ* collections and farmers' rights were not addressed by the CBD. The FAO Commission on Genetic Resources for Food and Agriculture rapidly convened negotiations to revise the International Undertaking on Plant Genetic Resources, an earlier non-binding cooperative framework for agricultural research. The CBD's Conference of the Parties endorsed and encouraged this initiative to establish a specific mechanism for ABS in agricultural research in 2000, when it decided (Decision V/26/A/7) that: "...in developing national legislation on access, Parties take into account and allow for the development of a multilateral system to facilitate access and benefit

South Asia's status on CBD			
Countries	Signed	Ratified	
Afghanistan	12.06.1992	19.09.2002	
Bangladesh	05.06.1992	03.05.1994	
Bhutan	11.06.1992	25.08.1995	
India	05.06.1992	18.02.1994	
Maldives	12.06.1992	09.11.1992	
Nepal	12.06.1992	23.11.1993	
Pakistan	05.06.1992	26.07.1994	
Sri Lanka	10.06.1992	23.03.1994	
Source: www.cbd.int			

sharing in the context of the International Undertaking on Plant Genetic Resources..." In November 2001, the ITPGRFA text was adopted as a replacement for the Undertaking to provide a specific, but fully compatible, interpretation of the CBD framework that addresses both the Nairobi Declaration and Decision V/26. The underlying assumption of the ITPGRFA expands slightly on these issues by recognizing that the traditional agricultural research sector has special needs in the context of ABS. These needs are largely based on the fact that the use of genetic resources in agricultural research tends to be characterized by, and benefit from, high-volume and low-margin transactions (i.e., many individual exchanges of materials that individually may be of marginal value but, collectively, produce a valuable whole). This is in direct contrast to the low-volume and high-margin transactions (i.e., relatively few exchanges but each one of potentially high individual value) that are the flagship successes of ABS in the chemical and pharmaceutical sectors.

What is a genetic resource?

In any legal instrument, the question of scope of application is of fundamental importance. It provides the basic outline of what is subject to the instrument's provisions and what is not. Both the CBD and the ITPGRFA use definitions as the key element in providing for their scope of application. In particular, the question of what falls within the understanding of "genetic resource", which is the basic object of regulation in both of the instruments, must be considered. The CBD links the definitions of genetic material and genetic resource, producing a composite definition²: "any material of plant, animal microbial or other origin containing functional units of heredity and of actual or potential value". The ITPGRFA follows a very similar pattern to the composite definition from the CBD, defining plant genetic resources for food and agriculture (PGRFA) as: "any material of plant origin, including reproductive and vegetative propagating material, containing functional units of heredity of actual or potential value for food and agriculture". However, the ITPGRFA definition contains two important variations from the CBD approach: first, the obvious restriction of the definition to material of *plant* origin, following the Treaty's narrower object scope; and second, the limitation of the value element to value for food and agriculture. The second variation creates a very significant limitation on the subject scope of the ITPGRFA.

Most national instruments to date have either adopted the CBD and ITPGRFA definitions verbatim or simply added some basic qualifications to these definitions. The problem with this approach is that neither of the international agreements actually provides definitions that can be practically implemented. Both sets of definitions are, in a strict reading, so broad that they are largely meaningless. This can be easily seen when one tries to imagine what biological material does not fall within the scope of the CBD definitions? Similarly, what plant material would fall outside of the scope of the ITPGRFA definition? For example, why would medicinal plants for pharmaceutical use fall outside its scope?

The need to have a framework that could be implemented led to the development of some supporting texts in various parts of the ITPGRFA that do clarify the ambiguities of the definitions to a large degree. The most obvious of these is that the chapeau to

Article 2 explicitly excludes trade in commodities from the scope of the Treaty. However, there are further clarifications of the ITPGRFA's scope that apply exclusively to its ABS mechanism, the multilateral system. The first of these can be found in Sub-article 11.2, where the coverage of the multilateral system is limited to PGRFA that are both listed in the Treaty's Annex I and that are under the management and control of a party and in the public domain (in addition, materials not fitting these three core criteria, including materials held in international collections, may be placed in the system voluntarily). These restrictions on scope provided for in Sub-article 11.2 all basically relate to the legal provenance of the material and, in essence, seek to extend the level of accessibility of PGRFA that exists at the national level to the international level. Sub-article 12.3 then builds on, and goes beyond, Sub-article 11.2. It builds on Sub-article 11.2 by adding further restrictions on scope in paragraphs e), f) and h), each of which potentially excludes some categories of PGRFA according to their legal status. Sub-article 12.3 goes beyond Sub-article 11.2 to the extent that, in paragraph a), it uses a form of restriction on scope that follows Article 2's exclusion of trade in commodities: i.e., it excludes some categories of use of PGRFA from the multilateral system.

The complexities of the scope of the ITPGRFA, in particular of its multilateral system of ABS, are important for two main reasons. First, in implementing the ITPGRFA, countries need to be aware of this scope and to implement it according to their own national situations. This is likely to be particularly important in the development of subsidiary legislation where the links between the ITPGRFA and the existing framework of national law will have to be addressed in detail. Second, the complexities of the scope of the ITPGRFA are also important as an indicator of how much work needs to be done to effectively implement the CBD's ABS framework at the national level. The ITPGRFA establishes a basic definition of PGRFA that arguably includes most plant materials of any kind. The ITPGRFA then uses this definition to develop a more specific and workable understanding that forms the heart of its ABS system by either excluding or including categories of PGRFA according to legal provenance or use. National implementers of the CBD's ABS framework beyond the scope of the ITPGRFA need to be aware that they have to develop a nationally specific scope that suits national needs and interests; otherwise they may be introducing additional regulation for buying fruit and vegetables as well as for commercial genetic research and development. Some combinations of legal provenance and use criteria do seem the most likely options for this purpose but countries may well identify others, such as the commonly seen distinctions based on categories of user, according to their needs. The key issue is that, whatever criteria are used to define scope, potential providers and users of genetic resources under an ABS system must be made clearly aware of what is in that system and what is not, what is regulated and what is not.

Sovereignty

Sub-article 15.1 of the CBD recognizes that states have sovereignty over their natural resources, including genetic resources, and, therefore, that they have the ultimate right to decide on questions of ownership and access. This means that, while the rest of Article 15 establishes a basic framework for access to genetic

South Asia's status on ITPGRFA

Countries	Signed/Acceded	Ratified	
Afghanistan	Acceded on 09.11.2006		
Bangladesh	17.10.2002	14.11.2003	
Bhutan	10.06.2002	02.09.2003	
India	10.06.2002	10.06.2002	
Maldives	Acceded on 02.03.2006		
Nepal	Not a contracting party		
Pakistan	02.09.2003		
Sri Lanka	Not a contracting party		
Source: www.planttreatv.com			

resources, the CBD accepts that states are doing this in exercise of their sovereignty and that they are free to interpret the details of this framework according to national law and practice. The ITPGRFA goes significantly further than the CBD on the question of the exercise of sovereignty because, through the Treaty, states have agreed to make a selection of plant materials available on fixed terms and conditions that constitute a detailed interpretation of the CBD framework. That is, they have limited their sovereign right to determine these terms and conditions unilaterally.³ However, the limitations on the scope of application of the ITPGRFA are constructed primarily so as not to intrude upon the sovereignty of states in terms of their decisions regarding property rights over genetic resources, something that is clearly demonstrated by the reference to only materials in the public domain or voluntarily submitted being within the ITPGRFA's ABS system.

The question of sovereignty is important from the point of view of both the implementation and enforcement of ABS systems. In terms of implementation, any ABS system must consider the pre-existing legal order and framework of property rights in the country. Where pre-existing legislative or subsidiary instruments are concerned, it may be deemed appropriate to adjust the legal order



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Farmers' Rights

or adapt to it. However, in some countries there may also be constitutional provisions with potential relevance and these are not so easily or casually adjusted. In particular, a number of legal systems tend to view plants, soils and air, and sometimes also animals, as legally following the tenure of land unless explicitly excepted by the constitution, such as is common with minerals. Quite apart from consideration of the pre-existing legal order, countries should consider what exercise of sovereignty, whether in terms of determining ownership or of defining other rights, would best suit their ABS objectives. ABS, as will be illustrated by a later discussion of other elements of the CBD framework, can serve a variety of purposes from a state perspective and the exercise of sovereignty should be determined according to the relative priority attached to these purposes rather than in the abstract.

In terms of enforcement, sovereignty usually has implications for two particular areas that relate to its expression as state power. The first is the basic fact that sovereignty has limits, particularly geographical limits, while genetic resources are highly mobile. This means that states are very often unable to exercise direct control over activities that are based on genetic resources over which they, at least nominally, have sovereignty. The main importance that this has for countries seeking to develop ABS systems is that such systems cannot effectively rely only on the exercise of sovereignty as power for enforcement. They must also consider how they might influence activities and events within the sovereignty of other states or how they might more directly influence the users of genetic resources through patterns of incentives and deterrents. This tends to suggest that mechanisms such as the ITPGRFA and the ongoing discussions around the possibility of an international ABS regime based on the CBD's Article 15 will be of increasing importance.

A second area where sovereignty as state power raises issues of enforcement is in its impact on behaviour. The collection, use and development of genetic resources is a difficult field to regulate and, where systems are based on state ownership and coercive mechanisms, there is a strong likelihood that both providers and users may undermine the system. This is because the costs of compliance will be perceived as relatively high coupled with a likely perception that the direct benefits of providing access will be perceived as relatively low by individual actors involved in such provision. These perceptions will, in turn, likely exist in an environment where both providers and users will see minimal risks in non-compliance. The combined effect of these various perceptions, whether accurate or not, will tend to be that providers and users will see a collective interest in non-compliance with ABS systems. One approach to addressing this has provided the foundation for the activities of a number of non-governmental organizations in the recent past. This is to stigmatize non-compliance as an anti-social behaviour that is exploitative of the poorest members of, and groups in, society.

In addition to this, there are two key things targeting the potential for negative perceptions that countries should bear in mind when developing ABS systems. First, the behaviour of the immediate providers of genetic resources, i.e., those who live where they are found or have immediate responsibility for their management, can be significantly influenced by the relative stake which

they believe they have in the system. So, the more that such direct providers are meaningfully involved in decision-making and the more that they are potential partners in benefit sharing, the more they will have invested in the system and will commit to its success. Similarly, where genetic resource users can see the potential for benefiting from compliance with an ABS system, such as through genuinely streamlined procedures or the potential for added value, they will be less likely to consider options for non-compliance. Going so far as to portray ABS relationships as partnerships between providers and users, rather than as simple exchange transactions, has also proved successful in a number of cases.

Facilitated access

Sub-article 15.2 of the CBD provides for the main limitation on sovereignty that parties to the Convention have agreed to: that they will provide facilitated access to genetic resources, provided that this access is for purposes that do not run contrary to the Convention's objectives. The basic requirement is that states should make access to genetic resources within their jurisdiction as easy as possible, within the limitations of the other provisions of Article 15 and the basic requirements of sovereignty. The qualification relating to the CBD's objectives may be assumed to mean that access should be subject to the overriding concerns of the conservation and sustainable use of biodiversity.

The ITPGRFA matches the CBD's requirement for facilitated access by states agreeing to make a specific list of materials, as provided for in Annex I of the Treaty, available to all subject only to a predetermined set of terms and conditions detailed in the Treaty

Two common misunderstar

Sovereignty is a much misunderstood concept that lies at the heart of all state powers and that is recognized as providing the basis for all regulation of access to genetic resources. The reason for the common misunderstandings is that sovereignty is a complex concept with a very wide range of implications that touch upon all aspects of the governance of a state. A convenient definition for the purpose of discussion here, as borrowed from Black's Law Dictionary, is, "the international independence of a state, combined with the right and power of regulating its internal affairs without foreign dictation".

The two most common misunderstandings regarding sovereignty in the context of access to genetic resources are that, first, it is seen as meaning state ownership of genetic resources and, second, it is seen as being conferred by the CBD. The first misunderstanding confuses one possible function of sovereignty, the establishment of property rights, with sovereignty itself. A state decision to declare genetic resources *res nullius*, or as having no owner and thus freely available to all, would be just as much an exercise of sovereignty as the decision to declare them state property. Sovereignty is the power to decide what property rights should, or should not, exist and how they may be exercised; not



and its subsidiary instrument, the standard material transfer agreement. As a result, both providers and recipients are made fully aware of their rights and responsibilities even prior to the completion of any exchange and transaction costs are reduced to a minimum. The major exception to this standardized, "as of right", system is that it is limited to access to materials that are under state control and in the public domain, as this is all that states can basically agree to without contradicting earlier sovereign actions regarding the creation of private property rights. There is also a further limitation, which is that the uses of material accessed are restricted, largely to the field of food and agriculture, which matches the basic scope of the ITPGRFA discussed above.

As mentioned in the discussion of sovereignty above, an overly coercive approach to sovereignty that restricts facilitated access is likely to prove counter-productive in enforcement terms. It also runs counter to the spirit of Article 15.2. Both the CBD and the ITPGRFA seek to promote the exploration, exchange and development of genetic resources in at least as strong a manner as they seek to promote rent-seeking approaches to exercising rights and controlling access. In this light, it should serve both a country's national interests and the fulfilment of its international obligations for its ABS system to be framed on the basis of how it makes legitimate ABS easier than it was prior to the existence of the system.

Country of origin

Sub-article 15.3 of the CBD provides for the identification of countries of origin as a means of identifying the relevant rights holders

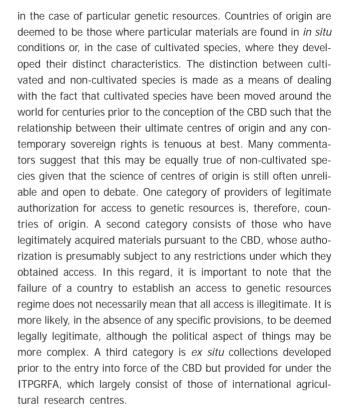
tandings about sovereignty

the rights themselves. The second misunderstanding is a failure to recognize the source of sovereignty. Sovereignty is innate to a state and basically derives from its jurisdiction over territory and people, although different political systems tend to view the precise details in slightly different ways.

An international agreement is, therefore, actually established through the exercise of sovereignty by states: it exists because states use their collective sovereignty to say that it does. As such, international agreements are actually seen by lawyers as restrictions on sovereignty rather than sources of

it. Through an international agreement, two or more states agree to temporarily limit their exercise of sovereignty as described in the agreement.

Sovereignty is innate and absolute and cannot, therefore, ever be permanently surrendered (e.g., in the way that property rights can) except by the dissolution of the state which has the right to exercise it and, even in this case, it may be argued that sovereignty is not surrendered but merely transferred to a new sovereign power. In the case of international agreements falling short of the dissolution of a state, this means that a state always has some form of right to withdraw from an agreement.



The ITPGRFA largely sidesteps the question of country of origin and focuses on the underlying question of the relevant rights holders who may authorize access. Using the ITPGRFA's multilateral system, countries not only surrender their right to determine the individual terms and conditions of access but also provide their blanket authorization for it. As a result, it is the multilateral system that becomes the source of the legitimacy of access and the question of country of origin becomes a moot point, particularly as it is also the multilateral system that accrues benefits, as discussed below.

Country of origin can be a complex and controversial issue in many sectors for a range of scientific, political and geographic reasons. There are two main implementation and enforcement concerns relating to country of origin. The most common of these is that, in developing ABS systems, countries only tend to view themselves as providers of genetic resources and rarely as users or transit points. As a result, ABS systems apply authorization requirements equally to all materials that happen to be within their jurisdiction for whatever reason. This sort of approach fails to consider that there may be a need for mechanisms that can recognize and support access authorization legitimately granted by either other countries or for actors who had themselves legitimately gained access to particular genetic resources. Similarly, a failure to adequately consider country of origin issues can threaten cooperative research, where countries or international collection centres may be reluctant to provide genetic resources to a country whose laws will claim rights over them once they enter its jurisdiction.

The second main issue relating to country of origin is its practicality in all cases. The CBD attempts to establish a practical approach that does not focus on ultimate origin, but it may still be



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problematic where countries have divergent views regarding the presence of a species in in situ conditions or the development of distinct characteristics. Clearly, ABS systems should be clear about what standards they intend to apply to these criteria, as well as explicitly recognizing the possibility of previously legitimately authorized access. A more difficult practical problem is the question of shared genetic resources, which has at least two aspects. First, systems may need some mechanism to avoid conflict when one country grants access and claims benefits while one or more others possess the same resources. Second, some form of mechanism to deal with situations where a user of genetic resources claims to have accessed them in one jurisdiction but is suspected of having accessed them elsewhere would be useful. If all countries had ABS systems, this would probably not have been a significant concern, as there would be some form of authorization "trail" in all cases. However, this is not the case.

Mutually agreed terms

Sub-articles 15.4 and 15.5, along with 15.7, provide the central operative elements of the mechanism for access to genetic resources adopted by the CBD. While all of these three sub-articles have been the subject of much debate since the entry into force of the CBD, they are not particularly complex, or even original, in their basic form. They are adopted almost directly from the almost universally accepted principles of legal contracts. Sub-article 15.4 provides that access to genetic resources must be subject to mutually agreed terms. No detail is stipulated; only that such terms must exist. This reflects the traditional legal principle that a valid agreement cannot be based on fraud or duress.

The ITPGRFA matches the CBD requirement for mutually agreed terms by actually stipulating what those terms are in the various relevant articles of the Treaty and its subsidiary instrument, the standard material transfer agreement. This reflects the mutual agreement between the states that negotiated the Treaty as to the terms upon which they will all provide access to, and receive, listed materials. Any states acceding to the ITPGRFA are deemed to mutually agree with the existing parties through the act of accession, and, for any other collections, are similarly deemed to

agree to the terms upon submission of collections to the jurisdiction of the Treaty.

The key challenge with mutually agreed terms is verifying the degree to which they are genuinely mutual and, following the underlying principle of equity provided for in the CBD, whether they are reasonable. The question of whether terms are genuinely mutual or not only tends to arise in the event of a dispute and the traditional legal approach to this is to settle the matter through some form of judicial or arbitral process.

However, some of the actors frequently involved in ABS, particularly rural communities and their members, may have limited access to these processes. This problem is exacerbated when one considers that the most controversial ABS exchanges tend to be across borders4 and between very asymmetrically aligned actors, such as subsistence farmers and multinational corporations. The registering of transactions with a central authority can serve to limit these problems to some degree, on the basis that their validity in terms of mutual agreement is, presumably, being attested to at the point of registration. Such registration can be cumbersome and expensive and, as such, could be limited as a mandatory requirement to particular types of transactions, such as those that have an international character. Whether an agreement is equitable or not is an even more complex question, due to its partly subjective nature. If this is a significant concern for regulating authorities, the most effective means of simplifying the question might be for these authorities to provide guidelines as to what they consider to be principles of equity or, in a stronger manner, to require the approval of agreements by a third party. However, either of these approaches can sometimes be perceived as unreasonable interference in a contractual relationship and need to be carefully considered, particularly where non-state actors possess rights to genetic resources. If they are considered, they should, at a minimum, be based on well-thought-out principles and as much experience as can be collected, as opposed to instincts or assumptions as to what might be equitable.

Prior informed consent

Sub-article 15.5 of the CBD is very closely related to 15.4 and requires that any access to genetic resources must be on the basis of prior informed consent (PIC). The basic meaning of this is straightforward: any transaction must be clearly understood and agreed to prior to its actually taking place. However, in practice, things tend to be significantly more complex, particularly due to varied perceptions of the appropriate standards for "informed" in the context of highly asymmetrical relationships between key actors and a general lack of clarity regarding who must be informed and who should give consent at the providing end of the transaction. Despite these problems, the CBD is actually very clear about who should give their consent: the state or whatever other actors the state may empower. This is a reflection of the sovereignty principle recognized by Sub-article 15.1, as it is for the state to determine issues of ownership and rights.

The ITPGRFA does not specifically address the question of PIC because it considers that all states that are parties to the agreement, and the rightholders of any other collections submitted to it, have given their PIC, if not during the Treaty negotiation process,

then during the process of ratification, accession or submission. Given that the Treaty only applies to materials under state control and in the public domain, private rightholders are not affected.

In implementing and enforcing ABS systems, the most important issue is to be very clear about who is empowered to provide PIC and how those seeking access are expected to go about obtaining such consent. A number of ABS systems have made the question a little opaque by trying to introduce requirements for consent from multiple actors. If this is deemed necessary, it will often be clearer to identify a lead actor who can be responsible for obtaining the consent of other actors, rather than expecting potential users to pursue parallel consent processes. However, one needs to be careful because, where the lead actor has a stake in the process (such as being an authority that might share in benefits provided to the state), this can lead to conflicts of interest. The question of whether consent is genuinely "informed" or not is very similar in nature to concerns about whether terms are genuinely mutual and equitable and, it is suggested, can be addressed in basically the same manner.

Research

The CBD's specific reference to research based on genetic resources in Sub-article 15.6 is, in many respects, an aspect of benefit sharing and as such can be seen as much as a question of emphasis as of substance. The CBD includes two non-binding recommendations: that research involving genetic resources should involve the country providing access to those resources and should take place in the country of origin. This is clearly intended to contribute towards the technological development of countries of origin that are developing countries and avoid their playing a role purely as raw material providers. The ITPGRFA follows the same approach as the CBD to research, at least to the extent that it seeks to promote exchanges that will avoid developing countries acting purely as raw material providers. It does not link particular resources and associated research activities with particular countries but rather seeks to generally promote collaborative research projects and access to technology involving genetic resources accessed under the Treaty's multilateral system.

In general terms, the CBD's research requirement, and the associated technology transfer provisions found in the CBD and other international agreements have proved controversial, with many commentators bemoaning their lack of effective implementation. However, in the case of the CBD, at least anecdotal evidence suggests relatively significant interest and activity in this area. The main implementation issues for countries fall in two areas. First, making the CBD's requirements mandatory is generally unwise as, in many cases, it will not even be a practical option and, in many others, it may not necessarily be desirable. More important is the second area, where authorities with a responsibility for ABS should be able to identify links between the proposed activities of potential users and the research priorities and activities of the various research institutions in a given country. Such a pro-active approach can allow for the opportunistic exploitation of activities as they emerge and, if well planned, may assist in moving a country further up the various value chains associated with genetic resources. This latter point can make a country more attractive to potential genetic resources users in a context where such actors very often have a wide choice about where to seek access. It can also serve to allow countries to capture a greater share of potential benefits by providing a wider and more sophisticated range of genetic resources-related services. Ultimately, a concerted effort at the planned exploitation of research opportunities may even lead to the emergence of new commercial opportunities within a country.

Benefit sharing

Sub-article 15.7 of the CBD contains the Convention's main provisions regarding benefit sharing, although there are numerous direct and implied references elsewhere in the text, and, as such, represents one of the pillars of the agreement. However, apart from establishing the basic principle of benefit sharing, the CBD defers to national jurisdictions regarding all details. What the CBD does require is that all parties must take measures "for fair and equitable sharing of research results and benefits from use". This creates an obligation for states acting as both providers and recipients of genetic resources and does not discriminate between developed and developing countries. Particular emphasis is placed on three categories of benefit: technology transfer, biotechnology and monetary (both bilateral and multilateral).

The ITPGRFA, primarily in its Article 13, follows the basic pattern of benefits proposed by the CBD, albeit with more detail, particularly regarding monetary benefit sharing. However, the ITPGRFA stresses that the ability to access materials that it guarantees to all of its parties constitutes the primary benefit it will provide. Monetary benefit sharing under the IT is largely voluntary, except where commercial products are not freely available to others for research purposes, and is based on a sales royalty mechanism.

Along with PIC, the nature of equitable benefit sharing has probably been the most controversial aspect of access to genetic resources systems. Experience to date suggests at least two very clear points regarding benefit sharing.

The first is that flexibility is an absolute necessity. Different actors have different capacities to pay, whether in cash or in kind,



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and it is unlikely to be equitable, or even effective, to expect the same of a student as of a research institute or a corporation. Also, they are likely to have different preferred approaches to providing benefits, such as different structures for cash payments or different mechanisms for providing access to technology, particularly soft technology. Related to this point is the fact that there is considerable anecdotal evidence that focusing on in-kind benefits can be far more rewarding, and far more effective in building long-term relationships, than focusing on monetary options.

The second clear point is to be practical. Any form of benefit can be difficult to distribute effectively where multiple actors are involved. This can be particularly problematic with relatively small sums of cash and with in-kind benefits. It is important not to unrealistically raise expectations. At the same time, it is also important to make sure that the various actors who may be involved with providing either access to genetic resources or associated benefits feel that they have a reasonable stake in how decisions regarding benefits are made. From a regulatory perspective, an ABS system must, at a minimum, be clear as to who should have influence over the decision-making process regarding benefits and provide for some reasonably transparent mechanism for determining how any benefits will be shared. For example, some existing ABS systems require the sharing of benefits with communities without adequately explaining: how the relevant communities will be identified; how benefits should be provided to, or divided among, a community; or, what should happen in cases where benefits are relatively small or inappropriate in a community context. A failure to adequately plan for these issues can even end up promoting conflict within, or among, communities instead of promoting their welfare.

Conclusion

It is important for any country to have a reasonable awareness of the history, objectives and structure of international agreements, particularly those they are a party to. For South Asian countries, there are three primary concerns that they need to address to capitalize on the CBD and the ITPGRFA.

First, there is a need to ensure that countries actually implement the two agreements so that there is a foundation of applicable national law. There have been a number of cases where access to genetic resources has been felt to be illegitimate or irregular but where there has been no national law in place and, therefore, the cases of access have been quite legal. The failure of a state to take legislative or administrative action should, in normal circumstances, be deemed to be a conscious policy decision not to regulate, as individual actors have no requirement, or means, to divine otherwise. Quite a number of legal instruments of relevance to ABS in South Asia appear to be either in draft form or are still lacking subsidiary legislation for implementation. Given that this situation persists some 16 years after the entry into force of the CBD and nearly five years after the entry into force of the ITPGRFA, it tends to suggest that states do not place high priority on protecting their, and their citizens', rights in this area in anything more than a rhetorical sense. The only way to effectively counter this is to move forward with implementation.

Second, in implementing the ABS framework provided by the CBD, it is vital that countries undertake at least a limited research

programme to identify their individual needs and priorities and the means by which they might provide the considerable detail lacking in the CBD framework in a manner that matches these needs and priorities. There has been a widespread tendency among countries to directly adopt the CBD text into their national laws and subsidiary legislation without either considering how it will be implemented or how it might impact different innovation sectors and pathways.

Third, many South Asian countries are parties to the ITPGRFA and have relatively active agricultural research sectors. As a result, it is clearly important for these countries to implement their ABS frameworks in a manner that adequately links CBD and ITPGRFA interests and objectives to ensure that the distinct concerns related to different sectors are catered for.

Notes

- 1 There has been significant discourse to the effect that modern biotechnologies, particularly genetic modification, are more akin to the dynamics of the chemical and pharmaceutical sectors than to traditional agricultural research but the ITPGRFA makes no direct distinction in this regard.
- The reason that the CBD definition is made up of the two nested elements, rather than some version of the composite used here, is largely a question of political history and emphasis. The term originated in the 1960s as a means of emphasizing the potential value of the heritable traits of biological materials to economic development. The two elements of the nested approach seek to emphasize first the key characteristic of heritability and, second, the fact that this characteristic has economic value.
- The ongoing discussions for an international regime on ABS under the CBD would, if successful in their current objectives, bring the level of limitation of sovereignty under the CBD to one similar to that established under the ITPGREA
- ⁴ Anecdotal evidence and experience, however, suggest that the vast proportion of exchanges actually occur within national borders.



South Asia Watch on Trade, Economics & Environment (SAWTEE) is a regional network that operates through its secretariat in Kathmandu and 11 member institutions from five South Asian countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka. The overall objective of SAWTEE is to build the capacity of concerned stakeholders in South Asia in the context of liberalization and globalization.

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