



Seed Banking in South Asia

for protection of farmers' rights

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The SAARC Seed Bank and the Framework for Material Transfer Agreement should not undermine farmers' rights to seeds. With 23 percent of the world's population but hardly 2 percent of global income, South Asia has the highest concentration of poverty and is the most food-insecure region in the world. The region houses 40 percent of the world's poor and 35 percent of the world's undernourished. According to a World Bank report, by 2050 South Asia's population, 70 percent of which lives in rural areas, is

likely to exceed 2.2 billion from 1.5 billion.² As most of the rural poor depend on agriculture for their livelihoods, Member States of the South Asian Association for Regional Cooperation (SAARC)—comprising Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka—have a major challenge to use agriculture as a means to improve their livelihood conditions and reduce poverty.



Finding effective measures to address an alarming situation of seed and food insecurity is a major policy concern for South Asia. The challenges to the seed sector in particular range from identifying effective strategies to conserve seeds in ex situ (gene banks) and in situ (farm fields) conditions to promoting exchange of seeds for breeding of plant varieties important for food security and climate change adaptation. It is not that the potential for cooperation on some of these areas has not yet been realized by South Asian governments.

In the Fifth SAARC Summit, held in Male in November 1990, South Asian governments had decided to cooperate on the exchange of expertise in genetic conservation and maintenance of germplasm banks. They had also agreed that cooperation in the cataloguing of genetic resources stored in different SAARC countries would be mutually beneficial. In addition, they had also expressed their consent to support the proposal made by the Group of Fifteen Developing Countries for the establishment of a gene bank³ for developing countries.

Though policy discourses have continued around this issue in the past two decades, a 2008 report of the SAARC Secretariat and the Food and Agriculture Organization of the United Nations (FAO) indicates that Bangladesh had suggested setting up a common regional gene bank. The idea was to mobilize this bank to develop new varieties, hybrids, livestock breeds, and promote exchange of germplasm on the grounds of improving coordination among Consultative Group on International Agricultural Research (CGIAR) centres, the FAO and national laboratories. It was, however, only in April 2010 that South Asian governments, in their declaration of the 16th SAARC Summit, agreed to promote

cooperation for a regional seed bank in South Asia. Finally, at the 17th SAARC Summit held in November 2011, they signed onto the SAARC Seed Bank Agreement; and the Framework for Material Transfer Agreement. The latter would be applicable to the operationalization of the SAARC Seed Bank Agreement, mainly for facilitating easy movement of seed and planting materials across South Asia.

This policy brief first reviews the provisions of the SAARC Seed Bank Agreement and the Framework for Material Transfer Agreement. It then highlights some of the policy concerns that South Asia, including the SAARC Seed Bank Board, needs to address for the operationalization of these initiatives in view of the need to recognize and protect farmers' rights to seeds and traditional knowledge.

SAARC Seed Bank Agreement

Objectives of the Bank

In the SAARC Seed Bank
Agreement to be administered
by the SAARC Seed Bank
Board (Article I), South Asian
governments have recognized
"the importance of regional and
sub-regional collective selfreliance in agriculture with
respect to attaining seed security
as a means of food security". They
have also recognized that the
establishment of such a seed bank
may, among others, contribute
to the objective of harmonized
seed testing and certification and

facilitate seed trade within the region. As mentioned in Article II of the Agreement, the box below highlights three objectives of the SAARC Seed Bank.

Seed reserve and its quality

The Agreement calls for the maintenance of the Seed Reserve under the Seed Bank, consisting of quality seeds of common varieties of rice, wheat, maize, pulses and oilseeds (Article VI). The Agreement mentions that initially, governments would collaborate on the availability of rice, wheat, pulses and oilseeds, and gradually other crops may be considered.

Seed replacement rate and common varieties

The Agreement requires SAARC Member States to undertake a planned approach to increase the seed replacement rate (SRR) at a faster rate and produce quality seed beyond the quantity planned to meet the SRR and the seed reserve (Article III). As the Agreement states, Member States shall collaborate to develop a list of common variety(ies) of major priority/identified crops while recognizing the need to preserve local/indigenous varieties (Article IV). In this process, they have to conduct adaptive trials in agreed/ identified agro-ecological zones in the region.

Maintaining seed quality

The Agreement states that the quality of all earmarked seeds

Three objectives of the SAARC Seed Bank

Provide regional support to national seed security efforts; address regional seed shortages through collective actions; and foster inter-country partnerships.

Increase seed
replacement rate with
appropriate varieties
at a faster rate as far
as possible so that the
use of quality seed for
crop production can be
ensured.

Act as a regional seed security reserve for Member States of SAARC.

 $\mathbf{\omega} \mid$ Policy Brief

will have to comply with the quality standards/requirements of the recipient Member State. Each Member State has to provide adequate seed storage facilities; inspect the quality seed stock periodically; apply appropriate quality control measures; and replace seeds that do not meet the required quality standards. In this context, each Member State has to undertake all efforts to comply with any guidelines on seed procedures and preservation methods or quality control measures adopted by the SAARC Seed Bank Board (Article

Withdrawal, release and replenishment

Each Member State can withdraw seeds that are part of the seed reserve (Article VIII). In cases of the need of seeds, the Member State in need shall have to directly notify the other Member States of the amount of seed required. After receiving the request, the other Member States are required to take immediate steps to make necessary arrangements to ensure immediate and speedy release of the required seeds (Article IX).

With regard to replenishment, the Member State that has released all or part of the seeds forming its share of the Reserve shall have to replace such quantity as soon as practicable and, in any event, no later than one calendar year following the date on which the release took place. Also, the Member State that has released its seeds will have to notify the Seed Bank Board of the terms and conditions of the release (Article X).

Determination of price

According to the Agreement, the determination of prices of seeds so released will be the subject of direct negotiations between the Member States concerned. Such determination will have to be based on the guidelines to be approved

by the Board, and will be done in accordance with the Board's principles:

- Price shall be representative of the market, both domestic and international, and may be adjusted suitably to reflect seasonal variations and the price movements in the recent past;
- Price quoted, in general, shall be lower than prices generally charged or quoted for countries beyond the region;
- A responding Member State shall endeavour to accord, as far as possible, national treatment in respect of calculating the cost components, for example, related to storage, internal freight, interests, insurance and overhead charges, margin of losses, etc.;
- Provision of deferred payment may be made.

The Agreement also states that in cases of emergency, humanitarian aspects would be given due importance while determining prices (Article XI).

Institutional arrangements

South Asian governments have agreed that there shall be a SAARC Seed Bank Board to administer the functioning of the Bank and for its policy making. The Board shall consist of one member from each Member State, one farmers' representative on a rotational basis from a Member State, and two members from the private sector (from SAARC Seed Forum and not from outside). The Board is tasked to meet at least once a year or, more often, as considered necessary (Article XII). The functions of the Board shall be, among others, to undertake activities to develop a list of common varieties, quality testing method, and Common Seed Certification Standards and Procedures. As for policy compliance, the Board is also tasked to facilitate harmonization of legislative measures concerning

seed system, and undertake a periodic review and assessment of the SRR and prospects in the region, including factors such as production, consumption, trade, process, quality and stocks of seeds.

The Board shall also assess immediate, short-term, and longterm policy actions to ensure adequate supplies of quality seeds in the region, and to submit recommendations for appropriate actions to the SAARC Agriculture Ministers. The Board, to be assisted by the SAARC Secretariat, will also disseminate information, facilitate capacity building and resolve disputes or differences regarding the interpretation and application of the provisions of this Agreement and functioning of the Seed Bank (Article XIII).

Framework for Material **Transfer Agreement**

In the preamble to this Framework, South Asian governments have realized that there is a dearth of quality seed in the region and that exchange of genetic materials could contribute to enhancing productivity. Expressing their desire to operate a Seed Bank, they have also agreed to address the matter of exchange of materials from the Seed Bank among the Member States. The Framework includes three sections and an annex.

Objectives and principles

Section 1 of the Framework explains its objectives and principles. The objective of this Framework is to facilitate supply/ exchange of seeds of common varieties among the Member States so that they can achieve food security in the region. The Framework mentions that it will be implemented in accordance with the existing laws, regulations and guidelines of SAARC Member States and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)4.



The annex of the Framework is a format for material transfer agreement which Member States have to use for the purpose of exchanging materials within the system of the Seed Bank.

Other provisions

In Sections 2 and 3, the Framework deals with other provisions. Section 1 mentions that there shall be a nominated National Focal Point in each Member State to deal with the business of material transfer. Section 3 provides for dispute settlement as per which any dispute shall be amicably settled through a request for bilateral consultation. If the dispute is not resolved bilaterally through consultations, the Framework mentions that the concerned Member State may seek mediation through the Seed Bank Board. If the Board's recommendations are not acceptable to the aggrieved Member State, it may then be referred to the SAARC Arbitration Council for final resolution.

Policy concerns

SAARC governments, in cooperation with other stakeholders, including farmers

and their organizations, need to work towards making these agreements an instrument to empower farmers to benefit from the seed bank system. In this respect, policy concerns that matter for the protection of the rights of local, indigenous and farming communities of the region must be addressed. This issue needs special policy attention not least because the global intellectual property regime has been expanding to affect traditional seed systems and limit, among others, farmers' rights to save, use, exchange and sell seeds.

As South Asian farming is characterized by fragmented lands and small landholdings by poor farmers who rely significantly on informal (traditional) system of farmer-to-farmer exchange of seeds, any decision to make regional institutional arrangements to exchange genetic materials and ensure seed and food security should not neglect the role of traditional seed system in strengthening farmers' rights to seeds and traditional knowledge. In this regard, the following policy concerns remain important for SAARC governments and stakeholders so that they operationalize the Seed Bank

and the Framework for Material Transfer in favour of the rights of local, indigenous and farming communities.

First, do South Asian governments view the Seed Bank system only for improved (modern) varieties or will they also mobilize this system as a reliable mechanism to promote conservation of local varieties? The current objective of the Seed Bank Agreement only focuses on increasing the SRR with appropriate varieties at a faster rate and other provisions of the Agreement are also not necessarily concerned about how conservation of genetic resources can be promoted to empower local farmers to benefit from local seed systems.

Second, while developing a list of common varieties, Article IV of the Agreement recognizes that there is a need to preserve local/indigenous varieties but it is not clear how and through what mechanisms they will conserve such varieties. The Seed Bank Board will have to work on this issue and come up with a plan of action to promote the conservation of such varieties.

Third, the Agreement calls for maintaining quality standards of



seeds under the Seed Bank system but it remains a major constraint for local and poor farmers in the region. Under what terms and conditions of quality standards will farmers' varieties be included within the Seed Bank system is indeed a major issue of concern. Harmonized seed testing and certification, and facilitation of seed trade within the region are two important features of the Seed Bank Agreement. However, whether these will only focus on modern varieties or there will be special measures for the consideration of local varieties of seeds is also an important concern to address.

Fourth, there are provisions for the withdrawal, release and replenishment of seeds. But how country-specific situation—mainly in view of the state of agriculture, farmers, and seed and food insecurity—would be considered is critical to addressing the issue of fair pricing and adequate supply of seeds. The Seed Board, based on country-specific assessments, will have to make strategic decisions in this regard.

Fifth, the SAARC Seed Bank Board has been conceptualized for administering the Agreement. Its role ranges from policy making and ensuring compliance to developing a list of common varieties and

setting common standards and certification rules. The provision for farmers' representation in the Board is a welcome move and in line with the principle of the ITPGRFA. But mostly, in South Asia, farmers' participation in decision making is a political issue and thus the governments need to find a proper institutional system to ensure that a real farmer participates in all processes of decision making and implementation of the Seed Bank. South Asian governments need to develop an effective institutional process for real farmers' participation at national and regional levels.

Sixth, the Framework for Material Transfer has been conceptualized to be in accordance with the ITPGRFA. While recognizing the need to be supportive of the implementation of global intellectual property agreements, the ITPGRFA provides its Contracting Parties with flexibility to implement farmers' rights to plant genetic resources for food and agriculture and traditional knowledge at the national level. This essentially means that for the purposes of the operationalization of the material transfer agreement, SAARC governments, though recognizing farmers' rights to seeds and traditional knowledge, also agree to abide by the global rules

of intellectual property on seeds. Hence, South Asian governments will have to take a balanced approach to safeguard the interests of its farmers from the impacts of intellectual property. In this process, the Seed Board also has to reflect upon the equity principles of the Convention on Biological Diversity⁵, mainly in terms of provisions for the protection of traditional knowledge, and access to genetic resources and benefit sharing.

Seventh, there is limited focus on agriculture research and development, including breeding of varieties that enhance food security and ensure effective climate change adaptation. The role of the Seed Bank in the expansion of agriculture research and development, including breeding of varieties for food security and climate change adaptation, needs to be strengthened through programmes such as participatory plant breeding and variety selection of local and, if required, other varieties.

Finally, the operationalization of the Seed Bank and the Framework for Material Transfer Agreement is at the formal level and it is important to note that the informal seed system in the region has a major role to play in advancing farmers' rights to seeds and traditional knowledge. Most of the seed demands of farmers in the developing world, including in South Asia, are still being met through local exchange and use of farm-saved seeds. Such exchange and use system still contributes 70–90 percent to total seed supply.⁶

Thus, SAARC should not undermine the community seed system but should strengthen it with adequate policy, legal and institutional measures for an enabling environment for the realization of farmers' rights. In this respect, the Seed Board will have to develop a set of guidelines to promote linkages between the Seed Bank and community seed banks. How farmers in the region can use the material transfer agreement for the benefit of community seed systems, including community seed banks, needs special attention to not only ensure that farmers access this system but they also contribute to its operationalization through the exchange of their materials.

Way forward

There are constraints for South Asian farmers to access and use seeds that are formally disseminated within the national seed system; under the private domain, for example, protected through intellectual property; stored in international gene banks and CGIAR centres; and available under the multilateral system of the ITPGRFA. Hence, the role of the traditional seed system in ensuring seed and food security as

well as promoting the conservation and sustainable use of local genetic resources should not be undermined.

As South Asian countries implement global rules of intellectual property, their resource-poor farmers face a risk of being deprived of their traditional rights, for example, the right to save, exchange, reuse and sell seeds. In addition to holding dialogues within the SAARC Seed Forum, South Asian nations, mainly Agriculture Ministers and the Seed Board, will thus have to consult national agriculture research institutions, and importantly South Asian farmers' organizations and community seed banks to devise mechanisms to create and strengthen linkages among the SAARC Seed Bank, and the national seed system and community system of seed conservation and use. The Seed Board, in particular, can assist with guidelines for such linkages. The main issue is that the SAARC Seed Bank and the Framework for Material Transfer Agreement should not undermine farmers' rights to seeds and traditional knowledge but should emerge as institutional systems to strengthen them. ■

Notes

¹ FAO and SAARC. 2008. Final report on regional strategies and programme for food security in the SAARC Member States. Bangkok and Kathmandu: Food and Agriculture Organization of the United Nations and South Asian Association for

- Regional Cooperation (SAARC).
- World Bank. 2009. South Asia: Shared views on development and climate change. Washington, D.C.: The World Bank.
- 3 It was not, however, meant for genetic resources for food and agriculture but only for medicinal plants.
- Negotiated within the FAO, the ITPGRFA sets up a multilateral system of access and benefit sharing. The application of the Treaty's multilateral system is limited to 64 plant genetic resources—food and forages—that are fundamental to food security and are either in the public domain or are under the hold of natural and legal persons. The Treaty also deals with farmers' rights pertaining to plant genetic resources for food and agriculture and traditional knowledge, including their rights to save, exchange, reuse and sell farmsaved seeds.
- Negotiated under the auspices of the United Nations Environment Programme, the Convention on Biological Diversity provides a framework for the implementation of access and benefit sharing, and calls for facilitating access to genetic resources, which has to be bilateral, and based on mutually agreed terms between the resource-providing and -receiving countries. The two equity principles of the Convention are rules for prior informed consent, and access and benefit sharing.
- Development Fund. 2011. "Banking for the future: Savings, security and seeds". A short study of Community Seed Banks in Bangladesh, Costa Rica, Ethiopia, Honduras, India, Nepal, Thailand, Zambia and Zimbabwe. Oslo: Norway.

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