



International policies and biocultural innovation: SIFOR policy review

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1. Summary

This report reviews international policies on biodiversity, genetic resources, agriculture, climate change and indigenous peoples' rights, to see the extent to which they support traditional knowledge, biocultural heritage and innovation by smallholder farmers. It is an output of the EU-funded SIFOR project – Smallholder Innovation for Resilience (2012-2017) – which sought to strengthen traditional knowledge-based innovation systems for food security in the face of climate change. The review was compiled to inform SIFOR's policy engagement work. It was conducted by a legal intern, Lucia Polackova, as part of her PhD research, from September 2016 to March 2017, and builds on an earlier policy review conducted by Nina Calza, a SIFOR intern.

The review focuses on the Biodiversity Convention, the Nagoya Protocol, the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA), the UPOV Convention on plant variety protection (1991), the FAO Commission on Genetic Resources for Food and Agriculture, the FAO Committee on World Food Security, UN Framework Convention on Climate Change policies including the Paris Agreement, and policies on indigenous peoples' rights, including the UN Declaration on the Rights of Indigenous Peoples. It sets out the objectives and main provisions of each policy, highlighting provisions that support, or threaten, the traditional knowledge, seeds, cultural values and landscapes of indigenous peoples and local communities (ie biocultural heritage), their related traditional resource rights and their engagement in innovation (including Participatory Plant Breeding). It also highlights the ratification status and related policies of the four SIFOR countries: China, India, Kenya and Peru. The main supportive provisions and gaps for each policy are summarised in tables at the end of each section. Key policy meetings, and how civil society can engage with these processes, are also highlighted.

The Convention on Biological Diversity (CBD) establishes a framework for access and benefit-sharing (ABS) between countries and emphasises the sovereign rights of 'states' over natural resources, which could be interpreted as all actors within states. But CBD Parties have tended to interpret this as government ownership over genetic resources, raising concerns amongst indigenous peoples about the lack of recognition of their rights over genetic resources such as medicinal plants which are used together with traditional knowledge and form part of their cultural heritage. However, CBD article 8J requires Parties to 'respect, preserve and maintain' the knowledge, innovations and practices of indigenous people and local communities, while 10C aims to protect and encourage customary use of biological resources, in accordance with traditional cultural practices. Furthermore, the FAO Treaty on Plant Genetic Resources (PGRs) recognises the rights of farmers to participate in benefit-sharing from genetic resources and in national decisions on PGRs, and their right to save, use, exchange and sell farm-saved seed. Yet the UPOV Convention 1991, which aims to protect plant breeders' rights, does not recognise farmers' rights and tends to limit them, and is often more strongly implemented and enforced by national governments. The FAO Commission on Genetic Resources' guidance on national seed policy formulation highlights the need to protect both farmers' and breeders' rights.

The FAO Committee on World Food Security (CFS) and Commission on Genetic Resources are paying increasing attention to the role of genetic resources in climate change adaptation. The CFS principles on responsible investment in agriculture (Rai), highlight the need to respect cultural heritage and traditional knowledge and innovation. The Commission has started to establish a global network for *in situ* conservation and on-farm management of PGRFA, though countries have proposed two separate networks, with *in situ* conservation focusing on existing protected areas (which target wild biodiversity and are largely state-run). The UNFCCC Paris Agreement recognises the role of indigenous knowledge in adaptation, and an Indigenous Peoples' Platform is being established to enhance indigenous and local community participation in the climate policy process. Agriculture issues have also gained prominence in recent UNFCCC COPs, but there has not yet been agreement on a COP Decision. Although policies on indigenous peoples' rights protect traditional knowledge, genetic resources, lands and culture more holistically, they tend not to be legally binding. The exception in ILO Convention 169, but this only has 22 Parties and is weakly enforced.

2. Convention on Biological Diversity and Nagoya Protocol

2.1. The Convention on Biological Diversity (CBD)¹

2.1.1. Main objectives

The CBD entered into force in December 1993. It has a near-universal membership, currently counting 196 Parties. It provides a global legal framework for action on biodiversity. The objectives of the Convention are the conservation of biological diversity; the sustainable use of the components of biodiversity; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources (GRs). It is legally binding on States which ratified it, but it is not as enforceable as some intellectual property treaties, since it is based on the reporting system to verify the implementation of States. The Conference of Parties (COP) meets one every two years – its next meeting will take place in the last quarter of 2018 in Egypt.

RATIFICATION STATUS OF THE CBD

Peru	Kenya	India	China
✓	✓	✓	✓

2.1.2. Next relevant meetings and opportunities for involvement

- COP14: last quarter of 2018, Egypt.
- Parties, relevant organisations and indigenous peoples and local communities may **submit by 31 March 2017** to the Executive Secretary (secretariat@cbd.int) their **views** concerning the Programme of Work on Article 8(j), including:
 - measures to address publicly available traditional knowledge (TK); and/or
 - best practices to implement “prior and informed consent”, “free, prior and informed consent” or “approval and involvement” (in relation to the Mo’otz kuxtal Voluntary Guidelines for TK);²
 - the *Glossary of key terms and concepts of relevant key terms and concepts to be used within the context of Article 8(j) and related provisions*, using the template provided on this website: <https://www.cbd.int/wg8j-10/review/>;³
 - information on good practices and actions undertaken at various levels, including through community-to-community exchanges, to repatriate, receive and restore TK relevant for the conservation and sustainable use of biological diversity (in relation to the Rutzolijirisaxik Voluntary Guidelines for the Repatriation of TK).⁴

¹ <https://www.cbd.int/convention/text/>

² Submission of views and information regarding the Programme of Work on Article 8(j) and related provisions, para. 3: <https://www.cbd.int/doc/notifications/2017/ntf-2017-006-8j-en.pdf>; See also COP Decision XIII/18 (CBD/COP/DEC/XIII/18), paras. 7, 8: <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-18-en.pdf>.

³ Submission of views and information regarding the Programme of Work on Article 8(j) and related provisions, para. 2: <https://www.cbd.int/doc/notifications/2017/ntf-2017-006-8j-en.pdf>; The draft Glossary can be found on this website: <https://www.cbd.int/wg8j-10/review/>.

⁴ Submission of views and information regarding the Programme of Work on Article 8(j) and related provisions, para. 1: <https://www.cbd.int/doc/notifications/2017/ntf-2017-006-8j-en.pdf>.

2.1.3. Relevant provisions (inc. Arts. 8(j) and 10(c))

Article 3: Principles

Art.3 explicitly recognises the “sovereign right [of States] to exploit their own resources pursuant to their own environmental policies”.

Article 6: General measures for conservation and sustainable use

Under Art.6, Parties are obliged to adopt (or adapt) national policies for the conservation and sustainable use of biodiversity.

Article 8: *In situ* conservation

Pursuant Art.8.j, the Parties are obliged to, “subject to [their] national legislation, respect, preserve and maintain **knowledge, innovations and practices of indigenous and local communities** embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices.”⁵⁶

Article 10: Sustainable use of biodiversity

Under Art. 10, the Parties undertake to “protect and **encourage customary use** of biological resources **in accordance with traditional cultural practices** that are compatible with conservation or sustainable use requirements” (Art.10.c), “support **local populations** to develop and implement remedial action in degraded areas” (Art.10.d) and “encourage cooperation between [...] governmental authorities and [the] private sector in developing methods for sustainable use of biological resources” (Art.10.e).

Article 12: Research

Art.12 obliges States to “promote and encourage research which contributes to the conservation and sustainable use of biological diversity, particularly in developing countries”.

Article 15: Access to Genetic Resources (GRs)

Art.15 recognises the “sovereign rights of States over their natural resources” (Art.15.1) and establishes that “access to GRs shall be subject to **prior informed consent** of the Contracting Party providing such resources” (Art.15.6)

Article 17: Exchange of information

Art.17 obliges Parties to facilitate the exchange of information, including the exchange of indigenous and traditional knowledge and **repatriation of information**.

2.1.4. The Bodies of the CBD and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

The Conference of Parties (COP) meets every two years to review progress in the implementation of the Convention, to adopt programmes of work, to achieve its objectives, and provide policy guidance.

The COP is assisted in its work by various subsidiary bodies, including the Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA); the Subsidiary Body for Implementation

⁵ Report of the Ad Hoc Open-Ended Inter-Sessional Working Group on Article 8(J) and Related Provisions of the Convention on Biological Diversity on its Ninth Meeting (UNEP/CBD/COP/13/3): <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-03-en.pdf>.

⁶ A Glossary of Relevant Key Terms and Concepts to be Used Within the Context of Article 8(J) and Related Provisions (UNEP/CBD/COP/13/17): <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-17-en.pdf>.

(SBI) and the Working Group on Article 8(j). The **SBSTTA** is a multidisciplinary body comprising government representatives. Among its tasks, it provides scientific and technical assessments of the status of biodiversity and identifies innovative, efficient and state-of-the-art technologies and know-how relating to the conservation and sustainable use of biodiversity. The **SBI** is charged with monitoring and reviewing the implementation of the Strategic Plan for Biodiversity 2011-2020 and of the Aichi Targets.

Another body which provides scientific advice is the IPBES.⁷ It was established in 2012 as an independent intergovernmental body open to all UN member states. Its main task is to assess the state of the world's biodiversity, its ecosystems and the essential services they provide to society. The next global assessment of biodiversity will be launched in 2018. IPBES should focus on "status and trends, the impact of biodiversity and ecosystem services on human well-being, and the effectiveness of responses, including the Strategic Plan and its Aichi Biodiversity Targets, building, inter alia, on its own and other relevant regional, subregional and thematic assessments, as well as on national reports"⁸ Moreover, IPBES should also build on the fourth edition of the Global Biodiversity Outlook; "contribute to assessments of the achievement of the Aichi Biodiversity Targets; and provide information on policy options available to deliver the 2050 Vision of the Strategic Plan for Biodiversity 2011-2020".⁹

2.1.5. Strategic Plan 2011-2020 and Aichi Targets¹⁰ (inc. Target 18 on TK)

The Strategic Plan 2011-2020 is a medium-term framework that identifies coherent national and international actions to reach the objectives of the Convention. Its purpose is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication". The Plan of Action consists of strategic goals and targets, the Aichi Biodiversity Targets as a flexible framework for the establishment of specific national targets under national biodiversity strategies and action plans (NBSAPs).¹¹ So far, only 114 Parties¹² to the Convention updated their NBSAPs, taking into consideration the Strategic Plan. However, according to the COP, most national targets are lower than the Aichi Targets or do not address all of the elements of the Aichi Targets.¹³

There are several targets relevant for traditional knowledge, agriculture and climate change. **Target 18** states that "by 2020, the **traditional knowledge**, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels". Limited progress has

⁷ Currently there are no calls for submissions, but future calls can be found here:

<https://www.cbd.int/convention/sbstta/notifications.shtml?thm=sbs&year=%25&menu=sbstta>.

⁸ COP decision XI/2, Review of progress in implementation of national biodiversity strategies and action plans and related capacity-building support to Parties, para. 28.

⁹ COP decision XI/13, Ways and means to improve the effectiveness of the SBSTTA and collaboration with the IPBES, section C, Collaboration with the IPBES, para. 4.

¹⁰ COP decision X/2, Strategic Plan for Biodiversity 2011-2020, Annex:

<https://www.cbd.int/decision/cop/?id=12268>.

¹¹ COP decision X/2, Strategic Plan for Biodiversity 2011-2020, para. 3.b:

<https://www.cbd.int/decision/cop/?id=12268>. NBSAPs are the principal instrument for implementing the Convention at the national level. Since 1993, 185 Parties have developed at least one NBSAP, while 11 Parties have yet to submit their first – See Updated Report on Progress in the Implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020 and Towards the Achievement of the Aichi Biodiversity Targets (UNEP/CBD/COP/13/8), para. 7: <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-08-en.pdf>.

¹² Including China in 2010, India in 2014 (addendum to the 2008 NBAP) and Peru in 2014. Kenya submitted its last NBSAP in 2000 and has failed to update it since then.

¹³ COP Decision XIII/1 (CBD/COP/DEC/XIII/1), para. 6: <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-01-en.pdf>.

been made towards achieving this target.¹⁴ **Target 7** aims to achieve, by 2020, sustainable management of areas under **agriculture** ensuring conservation of biodiversity. **Target 15** contributes to **climate change** mitigation and adaptation, as it aims to enhance, by 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks, through conservation and restoration.

The Global Biodiversity Outlook 4¹⁵ provides a mid-term assessment of progress towards the implementation of the Strategic Plan for Biodiversity 2011-2020. With regard to progress on **Aichi Target 18**, TK is reported to be in continuous decline. Even though TK, innovations and practices of ILCs are respected and recognised in a number of countries, they are not fully integrated and reflected in implementation of the Convention and the participation of ILCs is not full and effective. Current trends suggest that the actions taken to date are insufficient to achieve the target by 2020.¹⁶ The COP decided at its 13th session that GBO 5 presenting a follow/up to the Strategic Plan for Biodiversity 2011-2020 should be elaborated by COP15.¹⁷ Moreover, the COP asked the Executive Secretary to prepare a 2nd edition of the *Local Biodiversity Outlook: Indigenous Peoples' and Local Communities' Contributions to the Implementation of the Strategic Plan for Biodiversity 2011-2020*, which should include information on relevant TK on living in harmony with nature and Mother Earth; relevant practices and technologies regarding the conservation and sustainable use of biodiversity by IPLC, including customary sustainable use.¹⁸

2.1.6. National biodiversity strategies and action plans

While China, India and Peru successfully updated their NBSAPs to reflect the Strategic Plan and Aichi Targets, Kenya has not yet done so.

China updated its NBSAP 2011-2030 in 2010.¹⁹ Its NBSAP does not refer explicitly to biocultural heritage but it intends to launch a project on mapping “traditional agricultural technology, traditional culture and custom in minority-inhabited regions, which embody practices of biodiversity conservation and sustainable use”. Some of its priority areas focus on Art. 10(c) and Art. 8(j):

- Priority Area 1: To improve the policy and legal system of biodiversity conservation and sustainable use
- Priority Area 2: To incorporate biodiversity conservation into sectoral and regional planning and promote sustainable use
- Priority Area 6: To promote rational use and benefit sharing of biological genetic resources and associated traditional knowledge
- Priority Area 8: To improve capacities to cope with climate change

Conservation of biodiversity was set as the utmost priority, followed by sustainable use, participation of local communities and benefit sharing. The envisaged tasks include the development of regulations and systems to rescue, protect and inherit TK; a survey of TK, innovations and practices related to GRs; establishment of a database for minority traditional TK. With regard to climate change, China intends to develop an action plan of biodiversity conservation responding to climate change, and assess impacts of climate change on key ecosystems, species, genetic resources and related traditional knowledge and propose related measures.

India adopted an addendum to the 2008 NBSAP in 2014.²⁰ The action points of the NBAP include:

¹⁴ Report of the Subsidiary Body on Implementation on Its First Meeting (UNEP/CBD/COP/13/6), p. 5: <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-06-en.pdf>.

¹⁵ <https://www.cbd.int/gbo/gbo4/publication/gbo4-en-hr.pdf>.

¹⁶ *Ibid*, pp. 114-117.

¹⁷ COP Decision XIII/29, para. 1: <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-29-en.pdf>.

¹⁸ *Ibid*, para. 2.

¹⁹ <https://www.cbd.int/doc/world/cn/cn-nbsap-v2-en.pdf>.

²⁰ <https://www.cbd.int/doc/world/in/in-nbsap-v3-en.pdf>.

- promote best practices based on traditional sustainable uses of biodiversity and devise mechanisms for providing benefits to local communities,
- promote sustainable use of biological resources by supporting studies on traditional utilisation of natural resources,
- develop *sui generis* system for protection of TK and related rights including IPRs,
- strengthen systems for documentation, application and protection of biodiversity associated TK, providing adequate protection to these knowledge systems while encouraging benefits to communities,
- revive and revitalise sustainable traditional practices related to biodiversity and associated benefits to local communities with a view to promoting and strengthening TK and practices,
- raise awareness about the need to conserve, protect and “**gainfully use**” **TK systems** in order to strengthen implementation of policy, legislative and administrative measures for biodiversity conservation and management,

harmonise provisions concerning disclosure of sources of biological material and associated knowledge used in the inventions under the Patents Act, Protection of Plant Varieties and Farmers’ Rights Act, and Biological Diversity Act, to ensure sharing of benefits by the communities holding TK, from such use,

India included a specific national target on TK corresponding to Aichi Target 18. According to National Biodiversity Target 11, “by 2020, national initiatives using communities’ TK relating to biodiversity are strengthened, with the view to protecting this knowledge in accordance with national legislations and international obligations.” The indicators outlined in the NBSAP include: number of patents and ABS based on TK derived from folk knowledge, and number of innovations and traditional practices documented. The Plan attributes tasks to specific national agencies and institutions.

National Biodiversity Target 5 on sustainable management of agriculture corresponds to Aichi Targets 6, 7 and 8: “By 2020, measures are adopted for sustainable management of agriculture, forestry and fisheries”. It places emphasis on organic agriculture and local crop varieties.

Peru adopted its NBSAP for 2014-2018 in 2015.²¹ Peru considers it strategic to “promote initiatives for *in situ* conservation with the active participation of indigenous peoples and local communities”. The NBSAP explicitly recognises the right to preserve and use TK in the management and use of biodiversity as cultural heritage of indigenous peoples. Its national target 5 aims to “improve knowledge and technologies for the sustainable use of biodiversity, as well as enhancement of TK related to the biodiversity of indigenous peoples”. This target aims to integrate scientific and traditional knowledge related to conservation and sustainable use of biodiversity and refers to cultural heritage of IPLCs. However, it makes no reference to biocultural heritage.

2.1.7. Programme of work on Art. 8(j) (inc. Glossary of key terms)

The Working group on article 8(j) (WG8J) and related provisions was established in 1998 at COP4. The PoW on Art. 8(j) was endorsed at COP5. It aims to develop and implement participatory mechanisms for IPLCs, review the trends in TK, innovations and practices and ensure EBS and monitoring.

At its 9th session in 2015, WG8J adopted **Voluntary guidelines for reporting and preventing unlawful appropriation of TK**,²² which state that the implementation of measures to ensure that TK

²¹ <https://www.cbd.int/doc/world/pe/pe-nbsap-v2-es.pdf>.

²² Recommendation adopted by the Working Group 9/1. *Voluntary guidelines for the development of mechanisms, legislation or other appropriate initiatives to ensure the [free,] prior informed consent [or approval and involvement] of indigenous peoples and local communities for accessing their knowledge, innovations and practices, the fair and equitable sharing of benefits arising from the use and application of such knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity and for reporting and preventing unlawful appropriation of traditional knowledge*

that is owned or held IPLCs is accessed with their PIC, are an important tool against unauthorised use of TK. However, the WG8J leaves it to States to decide on concrete measures to prevent such unauthorised use and encourages States to approve the use of customary laws for dispute resolution. In addition, the Guidelines state that community protocols provide an opportunity for ILCs to articulate “their understanding of their **bio-cultural heritage** and therefore on what basis they will engage with a variety of stakeholders”. Indeed, bio-cultural heritage, seen as “the interconnections of their land rights, current socio-economic situation, environmental concerns, customary laws and traditional knowledge” gives communities a better negotiating position with respect to a variety of actors.²³

The WG8J is currently working on the draft “**Rutzolijirisaxik Voluntary Guidelines for the Repatriation of Traditional Knowledge** of Indigenous Peoples and Local Communities Relevant for the Conservation and Sustainable Use of Biological Diversity”.²⁴ The scope of application of these guidelines is rather restrictive. As a result, it is unclear whether they apply also to TK related to GRs under the Nagoya Protocol. However, it is likely that this kind of TK is excluded from the application of the guidelines.²⁵ WG8J is expected to complete the guidelines by COP14 in 2018. In the meantime, **organisations may submit** to the Executive Secretary information on good practices and actions undertaken at various levels, including through community-to-community exchanges, to repatriate, receive and restore TK by 31 March 2017, as specified in Section 2.2 on next meetings above.²⁶

Moreover, at its 10th session in 2010, the COP adopted the **Tkarihwaí:ri Code of Ethical Conduct** on Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant for the Conservation and Sustainable Use of Biological Diversity.²⁷ The code of conduct is aimed at promoting respect, preservation and maintenance of TK, **innovations** and practices of ILCs relevant for the conservation and sustainable use of biodiversity by all actors - governments, private companies (extractive, forestry industries), academic institutions or researchers and development agencies or organisations - that interact with them or realise activities in lands and waters traditionally occupied by them. The Code of Conduct encourages actors to:

- obtain PIC for any activity that can affect IPs and that take place in lands and waters that they use or occupy. “Such consent or approval should not be coerced, forced or manipulated”;
- ensure intercultural respect during activities and interaction with ILCs, this includes respect for TK, sacred sites, lands, species and secrets;
- ensure respect for collective and individual ownership of resources and knowledge of ILCs;
- share in a fair and equitable way with ILCs the benefits from their contribution to activities related to biodiversity and associated traditional knowledge proposed to take place on, or which are likely to impact on, sacred sites and lands and waters traditionally occupied or used by them;
- guarantee access to lands traditionally occupied or used by ILCs, as access to land, water and sacred sites is fundamental for retaining TK and associated biodiversity;
- guarantee access to traditional resources, therefore activities and interaction should not interfere with access to traditional resources and should respect customary rules governing access to such resources;

(UNEP/CBD/WG8J/REC/9/1), <https://www.cbd.int/doc/recommendations/wg8j-09/wg8j-09-rec-01-en.pdf>.

²³ Para. 21.

²⁴ <https://www.cbd.int/doc/recommendations/wg8j-09/wg8j-09-rec-02-en.pdf>.

²⁵ *Recommendation adopted by the Working Group. Task 15 of the Multi-year Programme of Work on the implementation of article 8(j) and related provisions: best-practice guidelines for the repatriation of indigenous and traditional knowledge* (UNEP/CBD/WG8J/REC/9/2), para. 14:

<https://www.cbd.int/doc/recommendations/wg8j-09/wg8j-09-rec-02-en.pdf>.

²⁶ *Ibid*, para. 2; see also Submission of views and information regarding the Programme of Work on Article 8(j) and related provisions, para. 1: <https://www.cbd.int/doc/notifications/2017/ntf-2017-006-8j-en.pdf>.

²⁷ <https://www.cbd.int/traditional/code/ethicalconduct-brochure-en.pdf>.

- involve ILCs in management of land, water and sacred sites traditionally occupied or used by them including protected areas;
- give ILCs the opportunity to participate in research activities that affect them or make use of their TK, decide their own research priorities and build their research institutions;
- make efforts for repatriation of information in order to facilitate the recovery of TK related to biological diversity.

Furthermore, at its 13th session in 2016, the Cop adopted **Mo'otz Kuxtal Voluntary guidelines** for the development of mechanisms, legislation or other appropriate initiatives to ensure the “prior and informed consent”, “free, prior and informed consent” or “approval and involvement”, depending on national circumstances, of IPLCs for accessing their knowledge, innovations and practices, for fair and equitable sharing of benefits arising from the use of their knowledge, innovations and practices relevant for the conservation and sustainable use of biological diversity, and for reporting and preventing unlawful appropriation of traditional knowledge.²⁸ The guidelines have a limited scope of application – the preamble of the decision explicitly states that they do **not apply to TK related to GRs under the Nagoya Protocol** but that they can be used as an input for the development of specific instruments under the Protocol. An interesting feature of these guidelines is that they are not limited to protecting and promoting TK, but they also suggest some best practices concerning reporting and prevention of unlawful appropriation.²⁹ TK obtained with PIC should be used only for the purpose for which the PIC was granted.

Even though COP13 was supposed to consider the updated **Glossary of relevant key terms and concepts to be used within the context of Article 8(j) and related provisions**, the Parties requested to postpone their adoption to COP14 due to disagreement on certain terms and concepts in order to be able to consider the Glossary at the 10th meeting of WG8J in late 2017. The Executive Secretary should make the draft glossary of key terms and concepts available for peer review by Parties, Governments, relevant organisations and IPLCs for further refinement prior to WG8J 10.³⁰ The Glossary provides a list of terms and their definitions, including TK, innovation, bio-cultural heritage, PIC, community protocols, IPLCs, etc.³¹

1. TK	2. Refers to the traditional knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity. (p. 16 of the Glossary)
3. Innovation	4. In the context of Article 8(j) and 10(c) and related provisions innovation should be understood through the filter of tradition. In other words, tradition could act as a filter through which innovation occurs, that is, innovation and creation that occur within a framework of tradition and culture. (p. 12 of the Glossary)
5. BCH	6. The knowledge, innovations, practices of indigenous peoples and local communities which are reflective of biocultural diversity. Biocultural heritage is typically held collectively and is inextricably linked to resources, such as biological and genetic diversity, plant varieties and

²⁸ COP Decision XIII/18 (CBD/COP/DEC/XIII/18): <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-18-en.pdf>.

²⁹ See COP Decision XIII/18, paras. 27 and 28.

³⁰ COP decision XIII/19. *Article 8(j) and related Articles: other matters related to the programme of work*, section B, para. 2 (CBD/COP/DEC/XIII/19): <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-19-en.pdf>.

³¹ *A glossary of relevant key terms and concepts to be used within the context of article 8(j) and related provisions* (UNEP/CBD/COP/13/17): <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-17-en.pdf>.

animal species present in ecosystems on lands and waters traditionally occupied and used by indigenous and local communities. It includes the biological diversity, cultural diversity and customary laws developed within the socioecological context of indigenous peoples and local communities.

7. By emphasising collective rather than individual rights, and addressing biocultural diversity, biocultural heritage reflects the holistic approach of many indigenous and local communities. This conceptual approach also recognises knowledge as “heritage” as opposed to “property”, thereby reflecting its custodial and intergenerational character. (p. 6 of the Glossary)

During the review period, India argued that “terms like cultural heritage, natural heritage and cultural diversity are not highly relevant in the context of Article 8(j) and thus may not be included in the glossary”.³² It also argued that the restricted list of activities under the definition of “application/use/utilisation of TK”³³ is similar to the rights granted under patent³⁴ and makes TK more susceptible to misappropriation by modern technology, thereby undermining the rights of TK holders.³⁵ Moreover, the inclusion of term of ‘bio-cultural heritage’ into the Glossary continues to be controversial. While some Parties, including India and Canada, supported its inclusion, others (Japan and Argentina) argued strongly for its exclusion, since the term is not mature enough.³⁶ Similarly, the Parties were not satisfied with the definition of ‘innovation’, which they find too general. Japan even suggested to remove it entirely from the Glossary.³⁷

There has been some progress in incorporating Article 8(j) on TK and Article 10(c) on customary sustainable use of biological diversity into other areas of work under the Convention. For instance, for Aichi Target 15 there has been increased interest in the possible contributions of indigenous peoples and local communities on issues associated with ecosystem restoration, ecosystem-based approaches to climate change adaptation.³⁸

2.1.8. Plan of action on customary sustainable use of biological diversity

With regard to Art. 10(c), the “**Plan of action on customary sustainable use of biological diversity**” was endorsed by the COP decision XII/12B in 2014. Its aim is “a just implementation of Article 10(c) at local, national, regional and international levels and to ensure the full and effective participation of

³² Compilation of views received on the Draft Glossary of relevant key terms and concepts to be used within the context of article 8(j) and related provisions (UNEP/CBD/COP/13/INF/5), p. 2:

<https://www.cbd.int/doc/meetings/cop/cop-13/information/cop-13-inf-05-en.pdf>.

³³ The definition of “application/use/utilisation of TK” is as follows: “The acts of making, using, offering for sale, selling, or importing for these purposes the protected traditional product or, where the subject matter of protection is a process, the acts of using the processes as well as the acts of using, offering for sale, selling, or importing for these purposes at least the product obtained directly by the traditional process.”

³⁴ A patent is an exclusive right to a product or a process that generally provides a new way of doing something or offers a new technical solution to a problem. In order to obtain patent production, the product must be novel, non-obvious and capable of industrial application (WIPO:

http://www.wipo.int/patents/en/faq_patents.html).

³⁵ P. 6.

³⁶ *Ibid*, p. 8.

³⁷ *Ibid*, p. 18.

³⁸ Updated Report on Progress in the Implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020 and Towards the Achievement of the Aichi Biodiversity Targets (UNEP/CBD/COP/13/8), para. 25: <https://www.cbd.int/doc/meetings/cop/cop-13/official/cop-13-08-en.pdf>

indigenous and local communities at all stages and levels of implementation”. It should be implemented in accordance with diverse national circumstances including legal and policy regimes and with the full and effective participation of indigenous and local communities, taking into consideration the UNDRIP.³⁹ The Plan of action mainstreams the ecosystem approach based on “the spiritual and cultural values as well as customary practices of many indigenous and local communities and their traditional knowledge, innovations and practices”. TK is put on equal footing with other forms of knowledge. ILCs are explicitly recognised as holders of TK, innovations and practices.⁴⁰ The Plan of action underpins the role of TK and ILCs in climate change adaptation.⁴¹ The elements of the Plan of Action are as follows:

- It mainly relates to protected areas and does not extend to agrobiodiversity.
- It tasks States to “maintain **biocultural values**” by incorporating customary sustainable use practices or policies into NBSAPs with the full and effective participation of ILCs.
- To promote and strengthen **community-based initiatives** that support and contribute to the implementation of Article 10(c), e.g. by mobilisation of funds, strengthening collaboration with the FAO Treaty and exchanging information among various stakeholders.
- To identify best practices (e.g. case studies, mechanisms, legislation and other appropriate initiatives) related to:
 - PIC and participation of ILCs;
 - the application of TK and customary sustainable use in protected areas;
 - the use of community protocols.

Moreover, the Conference of Parties decided, at its 12th session, that the future use of the terminology “**indigenous peoples and local communities**” instead of “indigenous and local communities” as is the wording in Art. 8(j) neither creates any further rights of IPLCs or obligations on States (presumably reflecting sovereignty concerns) nor alters the meaning the Art. 8(j). Although the decision does not specify the content of “further rights or obligations”, the Parties probably intended to safeguard national sovereignty and to avoid the obligations stemming the internationally recognised right of a people to self-determination.⁴²

Apart from the Plan, another important policy instrument concerning sustainable use is the voluntary **Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity** adopted by COP7 in 2004.⁴³ Principle 4 states that adaptive management should be based on both science and TK. Moreover, Principle 12 encourages stakeholders exploiting the resources of IPLCs to reflect their needs in the equitable distribution of benefits arising from the use of IPLCs’ resources.

2.1.9. Climate change and biodiversity (inc. ecosystem-based adaptation (EBA) and TK)

Climate change is one of the cross-cutting issues which was included in the work under the Convention in 2004 through COP decision VII/15. In decision X/33, COP mainstreams the ecosystem-based approach to mitigation and adaptation and invites States Parties to take into account impacts on biodiversity in planning and implementing effective climate change mitigation and adaptation activities through considering both science and TK, including the full involvement of indigenous and local communities.⁴⁴

³⁹ COP decision XII/12. Article 8(j) and related provisions (UNEP/CBD/COP/DEC/XII/12), section B, paras.2, 4: <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-en.pdf>.

⁴⁰ *Ibid*, section II.

⁴¹ *Ibid*, para. 6.

⁴² COP decision XII/12. Article 8(j) and related provisions (UNEP/CBD/COP/DEC/XII/12), section F: <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-en.pdf>.

⁴³ <https://www.cbd.int/doc/publications/addis-gdl-en.pdf>.

⁴⁴ COP decision X/33. Biodiversity and climate change (UNEP/CBD/COP/DEC/X/33), paras. 8.n and 8.v.i: <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-33-en.pdf>.

In decision XII/20 of 2014,⁴⁵ the COP acknowledges the significant role of **sustainable use of biodiversity** in climate-change mitigation and adaptation. It recognises that “indigenous, local and **traditional knowledge** systems and practices are a major resource for adapting to climate change, and that integrating such forms of knowledge into existing practices can increase the effectiveness of adaptation actions.”

The COP at its 13th session adopted a specific Decision on Biodiversity and Climate Change in which it states that ecosystem-based approaches to climate change adaptation and mitigation, to be developed and implemented by Parties and other stakeholders, should be based, first and foremost, on science but they should also “take into account” TK and practices of ILCs. The COP also encourages the Parties to integrate such approaches into their nationally determined contributions (NDCs); to share knowledge on ecosystem-based approaches and to promote **platforms for the exchange of experiences and sharing of best practices**, including those of **IPs and local communities** on ecosystem-based approaches to climate change adaptation and mitigation.⁴⁶ This could be potentially linked with the Local Communities and IPs Platform developed under the UNFCCC in line with decision 1/CP.21, para. 135. The decision also recognises the need for the full and effective participation of IPs and local communities including through PIC. The COP also mandated the Executive Secretary to prepare voluntary guidelines for the design and effective implementation of ecosystem-based approaches to climate change adaptation for consideration by SBSTTA prior to COP14, including information on integrating knowledge, technologies, practices and efforts of IPs and local communities related to addressing and responding to climate change and impacts on the biodiversity.⁴⁷

The COP also took note of the CGRFA “**Voluntary guidelines to support the integration of genetic diversity into national climate change adaptation planning**”, which seek to ensure the relevance of GRFA to the overall national adaptation planning process by identifying clear goals for conservation and use of GRFA as part of national adaptation to climate change, and ensuring the fullest involvement of all stakeholders, including TK holders.⁴⁸ The guidelines underline the important role of TK for identification of adaptation options, since local practices may constitute adaptation measures. According to the Guidelines, the “identification, assessment and compilation of these practices should be promoted with full participation of indigenous and local communities”.⁴⁹

Moreover, the SBSTTA and COP recognise a direct link between CBD and SDGs, namely Goals 13 (Climate Action), 14 (Life below Water) and 15 (Life on Land), and at the same time, they acknowledge the importance of the implementation of the Paris Agreement for the achievement of the vision of the Strategic Plan for Biodiversity 2011-2020 due to its ambitious temperature goal.⁵⁰

2.1.10. Programme of work on agricultural biodiversity

The programme of work on agricultural biodiversity was established by COP decision III/11 and endorsed by COP decision V/5. Later, three international initiatives on the conservation and sustainable use of pollinators (COP decision V/5), sustainable use of soil biodiversity (COP decision VI/5) and

⁴⁵ COP decision XII/20. Biodiversity and climate change and disaster risk reduction (UNEP/CBD/COP/DEC/XII/20): <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-20-en.pdf>.

⁴⁶ COP Decision XIII/4 (CBD/COP/DEC/XIII/4), paras. 2, 8(g), (l) and (n): <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-04-en.pdf>.

⁴⁷ *Ibid*, paras. 10, 11(f).

⁴⁸ *Ibid*, Preamble.

⁴⁹ Voluntary guidelines to support the integration of genetic diversity into national climate change adaptation planning, paras. 14, 34: <https://www.cbd.int/doc/meetings/sbstta/sbstta-20/information/sbstta-20-inf-04-en.pdf>.

⁵⁰ SBSTTA, Biodiversity and climate change (UNEP/CBD/SBSTTA/20/10), paras. 14, 24: <https://www.cbd.int/doc/meetings/sbstta/sbstta-20/official/sbstta-20-10-en.pdf>; Report of the Subsidiary Body on Implementation on Its First Meeting (UNEP/CBD/COP/13/6), p. 20: <https://www.cbd.int/doc/meetings/cop-13/official/cop-13-06-en.pdf>.

biodiversity for food and nutrition were launched (COP decision VII/23A). The PoW is based on 4 elements mirroring the ecosystem approach:

- Assessment of agro-biodiversity;
- Adaptive management promoting the positive effects and mitigating the negative impacts of agriculture on biodiversity and enhancing productivity and the capacity to sustain livelihoods;
- Capacity building to strengthen the capacities of farmers, indigenous and local communities to manage agro-biodiversity sustainably
- Mainstreaming to support the development of national plans and strategies for the conservation and sustainable use of agricultural biodiversity and to promote their mainstreaming and integration in sectoral and cross-sectoral plans

The scope of the programme of work (both domesticated and wild varieties) is linked to the definition of agricultural biodiversity established by the Conference of Parties. Agricultural biodiversity consists of “all components of biological diversity of relevance to food and agriculture, and all components of biological diversity that constitute the agricultural ecosystems, also named agro-ecosystems: the variety and variability of animals, plants and micro-organisms, at the genetic, species and ecosystem levels, which are necessary to sustain key functions of the agro-ecosystem, its structure and processes.”⁵¹ The Conference of Parties recognised that indigenous knowledge and culture are integral parts of the management of agricultural biodiversity.⁵²

Conservation of agrobiodiversity to provide specific gene pools for crop and livestock adaptation to climate change is one of the focus areas within the climate change theme. According to SBSTTA, increasing demand for food will lead to further large-scale conversion of grasslands, forests and peatlands if agricultural production methods and consumption patterns do not become more efficient and sustainable.⁵³

Many COP decisions refer to agro-biodiversity. In COP decision X/34, the Conference of Parties stressed the importance of agricultural biodiversity for food security and nutrition, especially in the face of climate change and limited natural resources; and recognised the importance of agricultural biodiversity and scientific, informal and traditional knowledge systems to the achievement of the objectives of the Convention, especially with regards to agricultural biodiversity.

The COP adopted a new decision on agro-biodiversity at its 13th session in which it encouraged Parties to “recognise the importance of the TK of IPLCs for the sustainability of agriculture that is aligned with their world view (cosmovisión) and upholds diversification and ecological rotation and agroforestry, and to promote community and family farming, alongside agroecology, with a view to promoting sustainable production and improving nutrition.”⁵⁴ The COP also addressed the issue of ‘**biocultural diversity**’ by encouraging Parties and other relevant stakeholders to protect and promote TK, innovations and

⁵¹ Agrobiodiversity includes 4 dimensions: 1) GRFA: PGRs, including crops, wild plants harvested and managed for food, trees on farms, pasture and rangeland species; animal GRs, including domesticated animals, wild animals hunted for food, wild and farmed fish and other aquatic organisms; microbial and fungal genetic resources; 2) Components of biodiversity supporting ecosystem services upon which agriculture is based, including organisms that contribute to nutrient cycling, pest and disease regulation, pollination, pollution and sediment regulation, maintenance of the hydrological cycle, erosion control, and climate regulation and carbon sequestration; 3) Abiotic factors, such as local climatic and chemical factors and the physical structure and functioning of ecosystems, which have a determining effect on agricultural biodiversity; 4) Socio-economic and cultural dimensions, including traditional and local knowledge of agricultural biodiversity, cultural factors and participatory processes, as well as tourism associated with agricultural landscapes. See COP decision V/5, Appendix, paras. 1, 2: <https://www.cbd.int/decision/cop/default.shtml?id=7147>.

⁵² *Ibid*, para. 2.b.

⁵³ SBSTTA, Biodiversity and climate change (UNEP/CBD/SBSTTA/20/10), p. 7: <https://www.cbd.int/doc/meetings/sbstta/sbstta-20/official/sbstta-20-10-en.pdf>.

⁵⁴ COP Decision XIII/3 (CBD/COP/DEC/XIII/3), para. 27: <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-03-en.pdf>.

practices, and to promote “**biological and cultural diversity**, and the links between them, for the conservation and sustainable use of pollinators.”⁵⁵

Moreover, the ministers and other heads of delegation, committed in the Cancun Declaration during the High-level segment of COP13 to promote diversified agro/ecological system and the conservation and cultivation of native varieties, farmers’ landraces and locally adapted breeds, including those threatened by production intensification.⁵⁶

With regard to the CBD’s **International Initiative on Biodiversity for Food and Nutrition**, its aim is to promote and improve the sustainable use of biodiversity in programmes contributing to food security and human nutrition, as a contribution to the achievement of SDGs. It seeks to integrate agriculture, environmental and cultural objectives. Activities under the initiative should be responsive to community needs and developed with increased participation of local and indigenous communities in national and international institutions, programmes and processes. Activities should be implemented in line with the 2004 *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security* adopted by the FAO.⁵⁷ The framework of the initiative provides for balance between scientific and traditional knowledge on the links between biodiversity, food and nutrition.⁵⁸ It also aims to mainstream the conservation and sustainable use of biodiversity into agendas, programmes and policies related to nutrition, health, agriculture and hunger and poverty reduction, including in regulatory frameworks and legislation at national and international levels. The initiative also promotes conservation and sustainable use of crop genetic diversity and supports all forms of food production of indigenous and local communities, in accordance with Art. 8(j).

2.2. Nagoya Protocol on Access and Benefit-Sharing⁵⁹

2.2.1. Main objectives

The Nagoya Protocol (NP) was adopted in Nagoya, Japan, in October 2010 and entered into force in October 2014. It is a supplementary agreement to the CBD, providing concrete legal framework for implementation of the CBD’s objective concerning access and benefit sharing (ABS). The Protocol has 93 (soon to become 96) Parties. It is legally binding on States which ratified it. Its objective is the fair and equitable sharing of benefits arising from the utilisation of genetic resources, thereby contributing to the conservation and sustainable use of biodiversity. The Nagoya Protocol applies to GRs covered by the CBD, and to the benefits arising from their utilisation as well as to TK associated with GRs that are covered by the CBD and the benefits arising from its utilisation. The Conference of Parties (COP-MOP) meets annually – its next meeting will take place in last quarter of 2018 in Egypt.

RATIFICATION STATUS OF THE NAGOYA PROTOCOL

Peru	Kenya	India	China
✓	✓	✓	✓

2.2.2. Next relevant meetings

- COP-MOP3: last quarter of 2018, Egypt

⁵⁵ COP Decision XIII/15 (CBD/COP/DEC/XIII/15), para. 7(s): <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-15-en.pdf>.

⁵⁶ Cancun Declaration on mainstreaming the conservation and sustainable use of biodiversity for well-being, 2-3 December 2016, Annex on Agriculture, Crop and Livestock, paras. 4, 8: <https://www.cbd.int/cop/cop-13/hls/cancun%20declaration-en.pdf>.

⁵⁷ <http://www.fao.org/3/a-y7937e.pdf>.

⁵⁸ COP decision VIII/23 D.1.1.

⁵⁹ <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>.

2.2.3. Relevant provisions

The Preamble uses a rather neutral tone in addressing TK – it notes “the interrelationship between GRs and TK, their inseparable nature for ILCs, the importance of TK for the conservation of biological diversity and the sustainable use of its components”. It also recognises the “diversity of circumstances in which TK associated with genetic resources is held or owned by ILCs”. It recalls the right of ILCs to identify the rightful holders of their TK.

Article 5: Fair and equitable benefit sharing

Art. 5.2 obliges each Party to “take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilisation of **GRs** that are held by ILCs, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.”

Under Art. 5.5, each Party committed to “take legislative, administrative or policy measures, as appropriate, in order that the benefits arising from the utilisation of **TK** associated with GRs are shared in a fair and equitable way with ILCs holding such knowledge. Such sharing shall be upon mutually agreed terms.”

Article 6: Access to GRs

Art. 6 reaffirms sovereign rights of States over natural resources and establishes that access to GRs is subject to PIC of States. It also obliges States, in line with domestic law and the principle of appropriateness, to take measures in order to ensure that the “**PIC** or approval and involvement of ILCs is obtained for access to GRs” but only “where they have the established right to grant access to such resources.”

Article 7: Access to TK associated with GRs

“In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that TK associated with GRs that is held by ILCs is accessed with the **PIC** or approval and involvement of these ILCs, and that mutually agreed terms have been established.” This provision is weakened by the reference to domestic law and to “as appropriate”.

Article 8: Special considerations

This Article obliges States to “create conditions to promote and encourage research which contributes to the conservation and sustainable use of biological diversity, particularly in developing countries, including through simplified measures on access **for non-commercial research purposes**.”

Article 10: ABS Clearing-House

Art. 10 establishes the ABS Clearing-House as a means for sharing of information related to ABS. In particular, it shall provide access to information made available by each Party relevant to the implementation of the NP, including information on access to TK (e.g. community protocols) in line with Art. 12.2.

Article 12: TK associated with GRs

Art. 12 obliges Parties to “take into consideration indigenous and local communities’ **customary laws, community protocols** and procedures, as applicable, with respect to TK associated with GRs” in implementing their obligations under the NP. However, this obligation is rather soft since it is subject to domestic law. This Article further encourages parties to “endeavour to support” the development by ILCs of community protocols on access to TK associated with GRs and on equitable benefit sharing.

During the first COP-MOP, which took place in 2014, the Parties discussed especially institutional and financial arrangements, including ABS Clearing-House, and did not examine substantive issues related

to access to GRs and TK. Community protocols and PIC were discussed only in relation to capacity building among ILCs. The proposed capacity-building activities include ‘train the trainer’ workshops and the development of e-learning modules for ILCs on how to develop community protocols in relation to access to TK and BS.⁶⁰ The development of procedures for granting or refusing to grant PIC - including the development of explanatory notes on the different components of PIC, the development of guidelines on granting PIC, organisation of trainings and orientation programmes on granting PIC - was proposed as a capacity-building activity necessary for effective implementation of the NP.⁶¹ As a result, a series of workshops on the development of community protocols were held in 2014 and 2015 in Latin America and Africa.

The negotiations in Cancun in December 2016 followed the same pattern, focusing on procedural rather than substantive matters. The Report on the implementation of the Strategic Framework for Capacity-building was discussed. This report refers to “development of **biocultural community protocols**” as a capacity-building activity funded by GEF.⁶² Moreover, the Report on progress towards Aichi Biodiversity Target 16 on the Nagoya Protocol discussed in Cancun refers to ILCs as “providers of traditional knowledge associated with genetic resources” rather than “holders of TK” and acknowledges that ILCs are taking steps to ensure that such knowledge is accessed with their PIC.⁶³ In addition, common formats have been developed for submission of community protocols and procedures and customary laws to the ABS Clearing House.⁶⁴ It is interesting that the COP-MOP adopted a decision on the use of the terminology “indigenous peoples and local communities”, where it states that this term will be used for the purposes of the NP as outlined in COP decision XII/12F.⁶⁵

⁶⁰ Decision NP-1/8. Measures to assist in capacity-building and capacity development (Article 22), (UNEP/CBD/NP/COP-MOP/DEC/1/8), Appendix II, p. 18: <https://www.cbd.int/doc/decisions/np-mop-01/np-mop-01-dec-08-en.pdf>.

⁶¹ *Ibid*, Appendix I, p. 17.

⁶² Progress Report on Implementation of the Strategic Framework for Capacity-Building and Development to Support the Effective Implementation of the Nagoya Protocol (UNEP/CBD/NP/COP-MOP/2/8), p. 7: <https://www.cbd.int/doc/meetings/abs/np-mop-02/official/np-mop-02-08-en.pdf>.

⁶³ Updated Report on Progress towards Aichi Biodiversity Target 16 on the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization (UNEP/CBD/NP/COP-MOP/2/2), para. 72: <https://www.cbd.int/doc/meetings/abs/np-mop-02/official/np-mop-02-02-en.pdf>.

⁶⁴ Report on Progress in the Implementation and Operation of the Access and Benefit-Sharing Clearing-House (UNEP/CBD/NP/COP-MOP/2/3), para. 27: <https://www.cbd.int/doc/meetings/abs/np-mop-02/official/np-mop-02-03-en.pdf>.

⁶⁵ COP-MOP Decision 2/7 (CBD/NP/MOP/DEC/2/7): <https://www.cbd.int/doc/decisions/np-mop-02/np-mop-02-dec-07-en.pdf>. COP decision XII/12F, pp. 15-16: <https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-12-en.pdf>.

Policy	Provisions on TK & BCH	Weaknesses	Gaps	Recommendations
CBD	<ul style="list-style-type: none"> Art. 8(j) and Aichi Target 18 on TK. Art. 10(c) on customary sustainable use of biodiversity. Plan of action on customary sustainable use of biological diversity puts TK on equal footing with other forms of knowledge, aims to maintain biocultural values and mainstreams ecosystem approach. Important role of TK recognised for climate change adaptation and conservation of agro-biodiversity. 	<ul style="list-style-type: none"> Soft and unclear language in Aichi Target 18 (“by 2020, TK is ‘respected’” – the obligation to respect in human rights terminology refers to refraining from interfering with the enjoyment of a given right). National goals set out for Target 18 are not on the track for achieving this goal in 2020. COP13 decision on Biodiversity and Climate Change: Ecosystem-based approaches to climate change adaptation and mitigation should be based, first and foremost, on science but they should also “take into account” TK and practices of ILCs. 	<ul style="list-style-type: none"> Little progress on the achievement of Target 18 on TK. Kenya has not yet aligned its NBSAP with the Strategic Plan and Aichi Targets. No centralised mechanism for indigenous and local communities to report unauthorised access of TK. 	<ul style="list-style-type: none"> The IPs platform envisaged under the “Climate change and biodiversity” theme could be integrated with the LCs and IPs Platform envisaged in UNFCCC COP decision 1/CP.21, para. 135 to avoid duplication and work on common issues. Need for standards and guidelines for the reporting and prevention of unlawful appropriation of TK.
Nagoya Protocol	<ul style="list-style-type: none"> Applies to TK associated with GRs. Art. 5 on BS from the utilisation of GRs and TK associated with GRs held by ILCs. Art. 7 on PIC for access to TK. Art. 8 on promotion of research for non-commercial purposes (relevant for PPB). Art. 12 on community protocols. 	<ul style="list-style-type: none"> Soft language for development of community protocols. National guarantees on PIC for access to TK is subject to domestic laws and the criterion of appropriateness. States are obliged to “endeavour” to support the development by ILCs of community protocols on access to TK held by ILCs, as applicable and subject to domestic law. 	<ul style="list-style-type: none"> Rights of IPLCs over GRs are recognised only in the preamble (not binding) and not in the operative part of the NP (this would be binding). Art. 6 recognises the sovereign rights of States over natural resources – access to GRs subject to PIC of parties, not ILCs. PIC of ILCs required only where their right to grant access to GRs is recognised in national law. 	<ul style="list-style-type: none"> Need for clarification of provisions on access to TK and GRs, especially of the issue of ownership in future decisions of the COP-MOP.

3. International Treaty on Plant Genetic Resources for Food and Agriculture and UPOV 1991

This section outlines relevant provisions and subsequent interpretations on farmers' rights and issues of relevance to the SIFOR project, including farmers' access to and participation in the MLS. It also explores relevant provisions of UPOV '91 (see p.13-14).

3.1. Main objectives of the FAO Treaty

The FAO Treaty was adopted by the UN FAO Conference in November 2001 and entered into force in 2004. The Treaty objectives are the **conservation and sustainable use** of PGRFA and the fair and equitable **sharing of benefits** arising from their use in harmony with the CBD and food security objectives. The Treaty applies to crops listed in Annex I. It is legally binding on States which ratified it but, unlike other international treaties like UPOV 91, it does not have a strong enforcement mechanism. The Governing Body of the Treaty meets every two years – the Seventh session was held in October-November 2017.

RATIFICATION STATUS OF THE FAO TREATY

Peru	Kenya	India	China	Not Parties
✓	✓	✓	x	NZ, USA, Russia

3.1.1. Relevant provisions

a. Farmers' Rights – Article 9

The Treaty recognises “the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of global food and agriculture production” (Art.9.1). The responsibility for realising, support and protection of farmers' rights rests with national governments and is subject to national legislation (Art.9.2).

The Treaty recognises, but is not limited to, the following **farmers' rights**:

Art.9.2.a: Protection of traditional knowledge (TK) relevant to plant genetic resources for food and agriculture (PGRFA);

Art.9.2.b: Equitable participation in sharing benefits arising from the utilisation of PGRFA;

Art.9.2.c: Participation in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA;

Art.9.3: Rights to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate (The exact wording of the Treaty is: “Nothing in this Article [9] shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.”).

Even though Art.9.2 does not explicitly mention who exactly holds the above-listed farmers' rights, it follows from Art.9.1 that “local and indigenous communities and farmers of all regions of the world” can be considered the right-holders for the purpose of Article 9.2. The reference to “local and indigenous communities and farmers of all regions of the world” also implies the collective nature of farmers' rights.

b. Interpretations of Article 9:

Art. 9.3: Rights to save, use, exchange and sell farm-saved seed

- The Recommendations from the Global Consultations on Farmers' Rights in Addis Ababa 23-25 November 2010 state that:⁶⁶
 - National governments should interpret Article 9.3 broadly, with particular regard to the fact that the factors involved in determining how to recognise these rights are not purely scientific and that these rights have implications for farmers' livelihoods and other social, economic and environmental issues.
 - Formal and local seed systems should be recognised as complementary and they should be legally recognised.
- Position of the Contracting Parties as summarised by the Secretariat at the Sixth Session of the Governing Body 2015:⁶⁷
 - Efficient remedies to the scarce possibilities of farmers to use, develop, exchange and sell their own seeds are PPB and community seed banks managed collectively by farmers. Seed laws should enhance utilisation of traditional varieties.
 - The DUS criteria are considered inappropriate for farmers' TK and varieties, which are always new and rarely homogeneous or stable, hence the need for exceptions to plants breeders' rights.

Art.9.2.a: Protection of TK relevant to PGRFA

- Global Consultations on Farmers' Rights 2010 - Recommendations:⁶⁸
 - National governments should protect and promote TK related to PGRFA; recognising the need for a holistic approach that combines livelihoods, cultures and landscape.
 - National governments should, in developing mechanisms to protect and promote TK related to PGRFA, consider Articles 5.1(c) and 5.1(d), i.e. they should support the efforts of indigenous and local communities in *in situ* conservation of PGRFA and their wild crop relatives.
 - National governments should promote collaboration between local communities and scientists and encourage the mutual exchange of knowledge and practices relevant to PGRFA, in line with Art. 9 (*e.g. they should promote PPB*)⁶⁹.
- Position of the Contracting Parties as summarised by the Secretariat at the Sixth Session of the Governing Body 2015:⁷⁰
 - Given the importance of recognition of collective rights of farmers, measures to protect TK should be collective and guarantee not only *de jure* but also *de facto* protection. The documentation of TK should be facilitated for this purpose.

Art.9.2.b: Equitable participation in benefit- sharing

⁶⁶ See "Joint Recommendations from the Global Consultation Conference on Farmers' Rights" in *Input paper submitted by Ethiopia based on Global Consultations on Farmers' Rights in 2010* attached to the document entitled "Global Consultations on Farmers' Rights in 2010" (IT/GB-4/11/Circ.1):

<http://www.planttreaty.org/sites/default/files/gb4c01e.pdf>.

⁶⁷ See *Report and Review of Submissions on the Implementation of Article 9, Farmers' Rights* (IT/GB-6/15/13): <http://www.planttreaty.org/sites/default/files/gb6w13e.pdf>. This is a working document drafted by the Secretariat on the basis of submissions of the Parties.

⁶⁸ See Note 1.

⁶⁹ This and other text in brackets & italics provides the author's own notes/comments.

⁷⁰ See Note 2.

- Global Consultations on Farmers' Rights 2010 - Recommendations:⁷¹
 - National Governments should promote farmers' access to PGRFA, including material under the MLS, and assist farmers and farmers' organisations in formulating and submitting proposals to the Treaty's Benefit-sharing Fund;
 - National governments should promote the right of farmers to directly benefit from the conservation and development of their PGRFA by ensuring their ability to participate in local and national agricultural markets.
 - National governments should consider establishing national benefit-sharing funds to support and promote the conservation and sustainable use of PGRFA among smallholder farmers.
 - In allocating funds and formulating national policies relating to agricultural biodiversity, national governments should promote equality between formal scientific and local community knowledge.
- Position of the Contracting Parties as summarised by the Secretariat at the Sixth Session of the Governing Body 2015:⁷²
 - Equitable participation of farmers in sharing benefits can be ensured through, *inter alia*, IP system over plant varieties; reward and support systems in the form of community seed banks, seed fairs, or seed registries; PPB and farmers' schools; continued access to PGRFA. Benefit-sharing at the community level should be based on customary rights, PIC and agreements.

Art.9.2.c: Participation in decision-making

- Global Consultations on Farmers' Rights 2010 - Recommendations:⁷³
 - National governments are encouraged to involve farmers in the reviews under Art.6.2.g, adjusting breeding strategies and regulations concerning variety release and seed distribution and in decision-making on breeding strategies and the regulation of variety release and registration.
- Position of the Contracting Parties as summarised by the Secretariat at the Sixth Session of the Governing Body 2015:⁷⁴
 - Farmers participate in national decision-making through public consultations or agricultural representatives, but challenges still persist. In order allow countries to determine whose participation they should seek and farmers to have control over their representatives, farmers should be better organised.

⁷¹ See Note 1.

⁷² See Note 2.

⁷³ See Note 1.

⁷⁴ See Note 2.

c. Conservation, exploration, collection, characterisation, evaluation and documentation of PGRFA – Article 5

Art.5.1 establishes that Contracting Parties shall promote the inventory and collection of PGRFA and relevant associated information (*i.e. TK*) on those PGR that are under threat or are of potential use. They shall promote farmers' and local communities' efforts to manage and conserve on-farm their PGRFA and promote *in situ* conservation of wild crop relatives and wild plants for food production by supporting the efforts of indigenous and local communities. Under Art. 5.2, Contracting Parties shall take steps to minimise or, if possible, eliminate threats to PGRFA.

d. Sustainable use of PGRFA – Article 6

Art.6 obliges Contracting Parties to develop and maintain appropriate policy and legal measures that promote the **sustainable use** of PGRFA, such as:

- i. pursuing agricultural policies that promote the development and maintenance of diverse farming systems,
- ii. strengthening research which enhances and conserves biodiversity by maximising intra- and inter-specific variation for the benefit of farmers, especially those who generate and use their own varieties and apply ecological principles in maintaining soil fertility and in combating diseases, weeds and pests (*i.e. agroecology*);
- iii. promoting plant breeding efforts which, with the participation of farmers, particularly in developing countries, strengthen the capacity to develop varieties adapted to social, economic and ecological conditions, including in marginal areas,
- iv. increasing the range of genetic diversity available to farmers,
- v. promoting, as appropriate, the expanded use of local and locally adapted crops, varieties and underutilised species;
- vi. supporting the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of crops in order to reduce crop vulnerability and genetic erosion;
- vii. reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution.

e. The multilateral system (MLS) – Articles 10-13

The MLS aims to facilitate access to GRs across borders based on the standard material transfer agreement (SMTA). Art.10.1 recognises “sovereign rights of States over their own PGRFA”, which implies that “the authority to determine access to those resources rests with national governments and is subject to national legislation”. The MLS covers PGRFA listed in Annex I, included by:

- Contracting Parties (in this case the PGRFA must be under their management and control and in the public domain - Art.11.2) – mandatory inclusion;
- natural and legal persons under the jurisdiction of Contracting Parties (Art.11.3) – voluntary inclusion;
- the International Agricultural Research Centres (IARCs) of the Consultative Group on International Agricultural Research (CGIAR) (Arts.11.5 and 15.1a) and other international institutions that voluntarily include them (Art.15.5).

The MLS aims to promote fair and equitable sharing of monetary and non-monetary benefits arising from the (commercial) use of PGRFA under the MLS (Art.13.2), which should flow primarily to farmers, especially in developing countries (Art.13.3). **Non-monetary benefits** include: facilitated access, exchange of information, access to and transfer of technology and capacity-building. The Contracting Parties undertake to adopt legal and other appropriate measures to provide facilitated access to PGRFA to other Contracting Parties and natural and legal persons through the MLS (Art.12.2) solely for

the purpose of utilisation and conservation for research, breeding and training for food and agriculture⁷⁵ (Art.12.3a). Access to PGRFA protected by IPRs shall be consistent with relevant international agreements⁷⁶ and national laws (Art.12.3.f). Recipients shall not claim any intellectual property or other rights limiting the facilitated access in the form received from the MLS (Art.12.3d).

The **monetary benefits** arising from the commercialisation of PGRFA are shared under the SMTA as follows: the recipient pays either (i) 1.1% of gross sales to the Treaty's Benefit-Sharing Fund in case of commercialisation of new products incorporating material accessed from the MLS if its availability to others is restricted; or (ii) 0.5% of gross sales on all PGRFA accessed from the MLS, regardless of whether the products incorporate the material accessed and regardless of whether the new products are available without restriction (Arts. 6.7 and 6.11 SMTA). These payments are complemented with voluntary contributions from countries from countries, private sector and international foundations.⁷⁷

3.2. The Ad Hoc Technical Committee on Sustainable Use of PGRFA (ACSU)

The ACSU was established by Resolution 7/11 of the Governing Body in 2011 with the mandate to develop a **Toolbox on sustainable use of PGRFA** guiding the implementation of Art.6. and to support the elaboration of a draft Programme of Work on sustainable use of PGRFA (PoW). The first **PoW** was adopted at the Fifth Session of the Governing Body (Annex 1, Table 1 of the Resolution 7/2013). It was successfully implemented and updated at the Sixth Session of the Governing Body in October 2015 (Annex 1, Table 1 of the Resolution 4/2015). The new PoW is aimed at a more comprehensive implementation of the Articles 5, 6 and 9 of the Treaty and it focuses namely on:

- the implementation of projects and policies for the achievement of sustainable use of PGRFA by Contracting Parties, stakeholders and international organisations;
- collection of information for the expansion of the Toolbox and the publication of the Toolbox in the form of a webpage/online portal;
- preparation of a study on innovation systems and technology cycles for the sustainable use of PGRFA;
- development of a pilot project on complementarity/ protection on formal and informal seed systems, and other relevant activities in the Resolution 5/2015;
- joint research, workshops and publications related to sustainability in agriculture and the linkages between *in situ* conservation /on-farm management and community-based initiatives for the sustainable use of crop wild relatives, landraces and underutilised species.

With regard to the Toolbox, it was proposed by the Governing Body at its Third Session as a measure to assist Contracting Parties in designing measures to promote the sustainable use of PGRFA. In 2015, the ACSU launched an online consultation to gather the views and needs of stakeholders⁷⁸ in sustainable use of PGRFA in which even States not parties to the Treaty participated.⁷⁹ Stakeholders

⁷⁵ Provided that such purpose does not include chemical, pharmaceutical and/or other non-food/feed industrial uses.

⁷⁶ Eg UPOV 91, TRIPS.

⁷⁷ So far, no payment under Art. 6 SMTA has been received: *Reviews and Assessments under the MLS, and of the Implementation and Operation of the SMTA* (IT/GB-5/13/6). Since 2013, the Governing Body has been postponing the regular review of payments and established an Ad Hoc Group with the task to revisit the payment provisions and review methods: *Reviews and Assessments under the MLS, and of the Implementation and Operation of the SMTA* (IT/GB-6/15/9).

⁷⁸ Governments; the private sector; civil society; public gene banks; universities.

⁷⁹ The following stakeholders participated in the online consultation: public research institutes; governmental bodies; private plant breeding companies and independent plant breeders; the commercial seed and plant production industries; public gene banks; farmers and seed producers;

involved in the consultation pointed out gaps in policies promoting farmer innovation in plant breeding; in recognition and support of informal seed systems, smallholder farmers maintaining local diversity, and regulations governing the certification and marketing of landraces/farmers' varieties; and in access to plant genetic material and associated information. The Toolbox will contribute to the Goals of the new PoW. The Toolbox will provide Contracting Parties and stakeholders with technical information, policy options, regulatory guidelines, training opportunities, decision tools, etc., addressing enhanced crop productivity, supporting on-farm management, and promoting landraces/farmers' varieties (recognising the TK and customary rules associated with seeds and other propagation materials)— in particular, to achieve increased and sustainable production and higher resilience while increasing the diversity underpinning traditional production systems and livelihoods, as well as contributing to the goals of breeding programmes for crop improvement. More specifically, stakeholders highlighted specific resources needed for specific topics, such as: background and case studies and implementation manual for the implementation of Farmers' Rights in the context of sustainable use of PGRFA; a handbook for policy-makers for IP implications of the CBD and Nagoya Protocol; policy guidelines for repatriation of PGRFA; case studies and guidelines for participatory plant breeding; seed exchange website.⁸⁰ The Toolbox should be finalised and published by 2017.

The Governing Body requested the Secretary, in its Resolution 4/2015, to invite further inputs from Contracting Parties, other governments, farmers' organisations, relevant stakeholders and experts to **collect additional and prospective tools for the Toolbox**.⁸¹

The Committee will meet on 24-25 October 2016 in Vienna to discuss the outcomes from the Expert Meeting on the Toolbox for Sustainable Use of Plant Genetic Resources for Food and Agriculture held in Volterra, Italy, in July 2016.

3.3. Toolbox on sustainable use: consultation and PPB⁸²

Relevant Articles: 9.2.a, 9.3, 6.2.c.

A great number of stakeholders involved in the Toolbox consultation in 2015 argued that there are serious gaps in the policies for farmer innovation in plant breeding for several reasons: there is little incentive for farmers to be involved in PPB; (ii) there are no policies in place to safeguard TK and hence the exchange of genetic resources; (iii) while plant breeders' rights are protected, no policies or laws support smallholder farmers' efforts; (iv) policy level support for farmer innovation is limited—most plant breeding is carried out in public and private breeding organisations; (v) farmers have very restricted access to PGR and need to be registered as breeders to use released varieties in breeding programmes; (vi) few countries and national programmes recognise PPB, it is often not supported by national seed legislation or there is limited financial and institutional support—farmers have limited access to gene bank collections for their PPB efforts; (vii) farmers' seed varieties cannot be sold; (viii) UPOV-type laws prevent PPB; (ix) decisions that promote seed production and farmers' varieties aim to get farmers in a UPOV-like system. IPRs are a way to legalise the expropriation of TK and varieties conserved and adapted by farmers. The recognition of farmers' IPRs is not a solution for the privatisation of seeds and knowledge.⁸³

farmers' associations; seed networks; NGOs; local and indigenous communities: *Development of a Toolbox for Sustainable Use of Plant Genetic Resources for Food and Agriculture* (IT/GB-6/15/Inf. 3).

⁸⁰ For more resources see *Development of a Toolbox for Sustainable Use of Plant Genetic Resources for Food and Agriculture* (IT/GB-6/15/Inf. 3), Table 5, p. 41-46.

⁸¹ <http://www.fao.org/3/a-bl143e.pdf?q=content/resolution-042015-implementation-article-6-sustainable-use-plant-genetic-resources-food-and-> : para.4.a.

⁸² *Ibid*, p. 16.

⁸³ *Compilation of Views and Experiences on the Implementation of Farmers' Rights submitted by Contracting Parties and relevant Organizations* (IT/ACSU-1/12/Inf.3). It is also recognised that IPRs can't protect indigenous and farmers innovations because of their characteristics and aims. The soft

3.4. Farmers' Rights and the right to food

The **Regional Coordination Workshop for Latin America and the Caribbean** took place in Ecuador in **July 2013**. It was organised by the Secretary on the basis of the Resolution 6/2011 of the Governing Body. Numerous representatives of NGOs, international organisations and Latin American and Caribbean Contracting Parties participated. The objectives of the workshop were to facilitate the exchange of experiences and lessons learned and to promote the dissemination of information on issues of relevance to the implementation of Article 9 of the Treaty. The workshop addressed, *inter alia*, the issue of farmers' rights.⁸⁴ The FAO representative highlighted the **link between farmers' rights and the right to food**, arguing that smallholder farmers have a right to produce food by traditional methods. The right-to-food approach to the implementation of farmers' rights implies, *inter alia*: (i) identification and characterisation of the right holders; (ii) identification of laws and policies which might affect the ability of people to access genetic resources; (iii) a strategy ensuring access without discrimination and positive action ensuring special protection for the most vulnerable segments of farmers; (iv) guaranteeing permanent access to PGRFA by smallholder farmers; (v) the need to reconcile farmers' rights with UPOV 91.

3.5. Farmers' access to MLS

Relevant Articles of the Treaty: 12.2.

During its Second meeting, the Ad Hoc Technical Advisory Committee on the Standard Material Transfer Agreement in 2010 stated that CG centres may distribute PGRFA to farmers for direct use for cultivation only if there is a separate express permission allowing for such distribution from the provider that included such material in the Multilateral System. Such permission is not required in case that germplasm is being restored to farmers that originally provided it. PGRFA distributed to farmers for cultivation should not be transferred with the SMTA but with a statement that the material can be used directly for cultivation. Where PGRFA are transferred for both research and breeding and for direct use for cultivation, or where the purpose of transfer is unclear, then both the SMTA and the statement giving express permission should be used, except in cases where the germplasm is being restored.⁸⁵

The sixth Governing Body meeting Resolution 4/2015, on implementation of article 6, **Requests** all Contracting Parties to promote, as appropriate, the access of all farmers including small-holder farmers, farmers organisations, indigenous peoples and local communities to PGRFA in the Multilateral System and the broadening of the genetic base of crops in use.⁸⁶

3.6. Can communities exchange PGRFA legally through the MLS?

- Can communities put their PGR into the MLS?
 - The Treaty recognises 2 types of voluntary inclusions:
 - All other holders (Art.11.2) (i.e. non-Parties to the Treaty)
 - Natural and legal persons (Art.11.3)

Art.11.2: The Contracting Parties invite all other holders of the PGRFA listed in Annex I *to include* these PGRFA in the MLS.

IPRs like geographic indications and collective trademarks can be useful to protect farmers' innovation (DUFIELD 2011).

⁸⁴ Informe del Taller Regional para America Latina y el Caribe - Quito (IT/GB-5/13/Circ. 03):

http://www.planttreaty.org/sites/default/files/gb5c03_Ecuador_s.pdf.

⁸⁵ *Transfer and use of PGRFA under the SMTA: transfer to farmers for direct use for cultivation* (IT/AC-SMTA-MLS 2/10/7).

⁸⁶ IT/GB-6/15/Res 4. <http://www.fao.org/3/a-bl143e.pdf?q=content/resolution-042015-implementation-article-6-sustainable-use-plant-genetic-resources-food-and->

Art.11.3: Contracting Parties also agree to take appropriate measures to encourage *natural and legal persons* within their jurisdiction who hold PGRFA listed in Annex I to include such PGRFA in the MLS.

According to the *Handbook to the Implementation of the MLS*, Sub-Article 11.2, which makes reference to the inclusion in the MLS of PGRFA held by others than Parties to the Treaty, is expanded upon in Sub-Article 11.3, which makes reference to the inclusion of PGRFA by natural and legal persons. Even if the Treaty does not define “natural and legal persons” or “all other holders”, this legal terminology covers both individuals and legally recognised groups, such as organisations, societies, institutions or companies.⁸⁷

Moreover, measures under Article 11.3 of the International Treaty may be addressed to a broad range of holders of material, from State genebanks in federal countries and semi-public genebanks partially integrated in administrative structures of governments to private genebanks.⁸⁸ It is disputable whether informal community seed banks can put their PGRFA into the MLS. If they qualify as semi-public or private genebanks, they should be able to do so.

The Ad Hoc Advisory Technical Committee on the SMTA and the MLS of the Treaty interprets “legal persons” as “the holders of semi-public and private collections, such as provincial governments, universities and independent research institutes, and private collectors”.⁸⁹ This seems to suggest that local and indigenous communities qualify as “legal persons” for the purpose of Article 11.3 provided that they are recognised by national governments to have as such or if they actively exercise their right to autonomy or self-government in matters relating to their internal and local affairs (the management of PGRFA can be considered a local affair).⁹⁰

The term “natural person” refers to an individual who could potentially put the PGRFA into the MLS on behalf of the community, provided that he or she exercises some sort of control over the material.

Indeed, according to the Ad Hoc Committee, natural and legal persons who intend to include their PGRFA into the MLS should retain some form of *control on the material*, for example through property rights.⁹¹ The PGRFA collections of these holders must not be “under the management and control”⁹² of a Contracting Party or “in the public domain”,⁹³ but they must be *managed and controlled by a separate entity over which the State does not have any control*. Pursuant to the UNDRIP, indigenous peoples have the right to own, use, develop and control the resources that they possess by reason of traditional ownership as well as those which they have otherwise acquired⁹⁴ and to maintain, control, protect and develop their genetic resources and seeds.⁹⁵ Therefore, if local and indigenous communities collectively own PGRFA, the requirement of “control on the material” is satisfied. Accordingly, legally recognised communities may put their PGRFA into the MLS.

An important precedent is that of 6 Potato Park communities which submitted their collectively owned PGRFA to the MLS through the Association of Communities with support of ANDES.⁹⁶

- How can they put their PGRFA into the MLS?

According to the opinion of the ACSU, there are 4 alternatives for putting material into the MLS:

⁸⁷ See “Notification of PGRFA in the Multilateral System” in *Handbook to the Implementation of the MLS of the International Treaty* (IT/AC-SMTA-MLS 3/12/Inf. 2).

⁸⁸ *Legal and Administrative Measures to Encourage Natural and Legal Persons to Voluntarily Place Material in the MLS* (IT/AC-SMTA-MLS 1/10/5), p. 9.

⁸⁹ *Ibid*, p. 6.

⁹⁰ United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Art. 4.

⁹¹ *Legal and Administrative Measures to Encourage Natural and Legal Persons to Voluntarily Place Material in the MLS* (IT/AC-SMTA-MLS 1/10/5), p.4.

⁹² It can be interpreted as a factual as well as a legal qualification.

⁹³ It is a qualification of a legal nature. It may refer to public property or collections entirely or partly supported by public funds or, in intellectual property law, materials which are not protected by IPRs.

⁹⁴ UNDRIP, Art. 26.2.

⁹⁵ UNDRIP, Art. 31.

⁹⁶ See <http://www.fao.org/3/a-bb861e.pdf>.

1. By providing a recipient with a sample of material of one of the crops in Annex 1 to the Treaty under an SMTA.
2. By undertaking to provide material to others, on request, through the SMTA (by notification to the Secretary of the Treaty or equivalent public statement).
3. By documenting the material (what the materials and their characteristics are, where they are held and by whom, and how they may be obtained).
4. By donating material to an institution that has already undertaken to hold material within the MLS, such as a national, regional or international genebank. No SMTA is needed for such transfer, a letter will suffice.⁹⁷

Voluntary inclusions in the Multilateral System should be communicated to the Secretariat of the International Treaty using the sample letter of notification available on the International Treaty website in order to provide comprehensive information to the Governing Body in accordance with Resolution 4/2009.⁹⁸

Natural and legal persons can continue to freely use and access the material that they have put into the MLS. However, if they subsequently accept back from another person, under an SMTA, the same Material, or a product under development that derived from that same Material, that SMTA would be binding.

- Can communities access material included in the MLS?

Art.12.2: Contracting Parties are obliged to provide facilitated access to PGRFA to legal and natural persons under the jurisdiction of any Contracting Party, even those who have not included any material in the MLS.⁹⁹

Material included in the MLS may also be transferred to a Recipient in a non-Contracting Party.¹⁰⁰

As long as communities qualify as “natural or legal persons”, they may access the material in the MLS. Moreover, individual members of the community enjoy the same access as natural persons.¹⁰¹

FAO TREATY SUMMARY

	SUPPORT	GAPS
TK	<p><i>Art.9.2.a:</i> Protection of TK relevant for PGRFA¹⁰²</p> <p><i>Art.5.1.b:</i> Protection of associated</p>	<ul style="list-style-type: none"> • No provision on PIC but the Secretary highlighted at the 6th Session of the Governing Body (2015) that measures to protect TK, including PIC, should be collective.¹⁰³

⁹⁷ *Practical and legal implications for natural and legal persons putting material into the Multilateral System* (IT/AC-SMTA-MLS 2/10/2).

⁹⁸ *Legal and Administrative Measures to Encourage Natural and Legal Persons to Voluntarily Place Material in the MLS* (IT/AC-SMTA-MLS 1/10/5), p.9.

⁹⁹ Art. 11.4 of the FAO Treaty.

¹⁰⁰ ¹⁰⁰ *Practical and legal implications for natural and legal persons putting material into the Multilateral System* (IT/AC-SMTA-MLS 2/10/2), p. 7.

¹⁰¹ See part “Farmers’ access to MLS” above.

¹⁰² Peru has developed laws to protect TK of indigenous peoples, but they do not protect rights of farmers and communities over associated GRs. In China, farmers’ TK and seed systems are still not fully recognised. Indian National Biodiversity Act recognises rights of communities over TK (IT/GB-6/15/Inf.59).

¹⁰³ *Report and Review of Submissions on the Implementation of Article 9, Farmers’ Rights* (IT/GB-6/15/13), para. 10.

	information on PGRFA	
Seeds	<p><i>Art. 5: Conservation</i> <i>Art. 6: Sustainable use</i></p> <p><i>Art.9.3: Rights to save, sell and exchange seeds</i></p> <p><i>Art.12.2: Farmers' access to seeds</i></p>	<ul style="list-style-type: none"> • National sovereignty over natural resources. • Promotion of distribution of new varieties. • Complicated and unclear system to permit farmers' access to <i>ex situ</i> collection and multilateral system.
Culture	<p><i>Art.5.1.c: Promotion of farmers' and local communities' efforts in conservation</i></p> <p><i>Art.6.2.a: Promotion of diverse farming systems</i></p>	<ul style="list-style-type: none"> • No mention of customary laws and values in the Treaty. • Limited recognition of the link between TK, genetic resources, landscapes and local values and customary laws.¹⁰⁴
Rights	<i>Art. 9:</i> ¹⁰⁵ Farmers' rights (protection of TK and GRs, benefit sharing, participation in decision-making, saving and exchange of seeds)	<ul style="list-style-type: none"> • National responsibility for the realisation of farmers' rights. • Lack of national enforcement. • Lack of national funds to support realisation of farmers' rights. • Existing disparities between Art.9 ITPGRFA and protection of plant breeders' rights under UPOV 91, which is more strongly enforced.¹⁰⁶
Participation	<i>Art.6.2.g: Review of breeding strategies</i>	<ul style="list-style-type: none"> • Limited participation of farmers in decision-making processes.

¹⁰⁴ The Secretariat is moving towards recognition of the importance of customary rights, see *Report and Review of Submissions on the Implementation of Article 9, Farmers' Rights* (IT/GB-6/15/13). The importance of TK and customary laws relevant to GRs is highlighted in the Toolbox as well – see the part on “ACSU” above. Moreover, the FAO asserts the right of farmers to produce food by traditional methods – see the part on “Latin American Workshop” above.

¹⁰⁵ Peru and China protect plant breeders' rights without equivalent protection for farmers' rights. India entitles farmers who have bred/developed a new crop variety to have same entitlements as plant breeders' rights: *Compilation of Submissions on Farmers' Rights for the Sixth Session* (IT/GB-6/15/Inf.5).

¹⁰⁶ “1991 UPOV-type plant variety protection impedes informal exchange and sale of seeds, and it reduces opportunities for on-farm breeding, varietal improvement and selection by farmers. By doing so, UPOV 1991 also imposes restrictions on research and breeding, which takes place outside the formal seed system, and should fulfill the benefit-sharing requirement of the SMTA. Chiarolla, Jungcurt, 2011 Outstanding Issues on Access and Benefit Sharing under the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture, Berne Declaration, UTVIKLINGSFONDET.

	Art.9.2.c: ¹⁰⁷ Participation in decision-making	
Innovation	Art.6.2.b-c: PPB	• Lack of policies promoting farmer innovation in plant breeding.

3.7. International Convention for the Protection of New Varieties of Plants – UPOV 91

RATIFICATION STATUS

Peru	Kenya	India	China
✓	✓	x	✓

The Convention was first adopted in 1962 and subsequently updated in 1972 and 1991. It aims to protect breeders' rights over plant varieties. This framework is the most widely implemented PVP system among Contracting Parties of the TRIPS Agreement, which obliges States to "provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof."¹⁰⁸ Therefore, States implement UPOV in order to comply with the TRIPS obligations.

Relevant provisions of UPOV 91:¹⁰⁹

Art.1(iv) defines a "breeder" as:

- the person who bred, or discovered and developed, a variety,
- the person who is the employer of the aforementioned person or who has commissioned the latter's work, where the laws of the relevant Contracting Party so provide, or
- the successor in title of the first or second aforementioned person.

This definition does not ensure the protection of varieties developed in collective, informal breeding systems where no 'legal person' is the owner.

Art.2 obliges States to grant and protect breeders' rights over all plant genera and species (Art.3) for a minimum of 20 years (Art.19).

Art.5: Varieties eligible for protection must meet requirements for novelty, **distinctiveness, uniformity and stability**.

A distinct variety is "clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of the filing of the application" (Art.7). A variety is deemed uniform "if, subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its relevant characteristics" (Art.8). A variety is deemed stable "if its relevant

¹⁰⁷ In India, farmers' participation is limited. Rich industrial farmers have influence. Government institutions are more open to farmer and community involvement but closed to NGOs. In Peru, farmer and communities are involvement in national environment policy making consists more in consultation than participation. They are less involved in agriculture sector: *Compilation of Submissions on Farmers' Rights for the Sixth Session* (IT/GB-6/15/Inf.5).

¹⁰⁸ Art.27.3.b.

¹⁰⁹ <http://www.upov.int/upovlex/en/conventions/1991/content.html>.

characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle” (Art.9). It follows that, as farmers’ varieties are variable and heterogeneous, the DUS criteria exclude them from protection.

Moreover, these criteria favour genetic uniformity, which contradicts the current FAO policies aimed at promoting diversity of genetic resources in order to enhance resilience of agricultural systems in the face of climate change. Indeed, the DUS criteria do not promote the use of locally adapted crops, nor the development of varieties adapted to unique social, economic and ecological conditions.¹¹⁰

Art.14 sets out the **scope of the breeder’s right**. The following acts in respect of the propagating material of the protected variety shall require the authorisation of the breeder:

- production or reproduction (multiplication),
- conditioning for the purpose of propagation,
- offering for sale,
- selling or other marketing,
- exporting,
- importing, stocking for any of the purposes mentioned above.

This provision applies also to essentially derived varieties (EDVs), which means that it precludes farmer innovation and plant breeding, as improvements made upon protected varieties that are determined to be EDVs fall under the exclusive rights granted to the original breeder. Farmers’ might be restricted from selling locally-adapted varieties that have been bred using protected varieties in the future. This contradicts Art.9 of the FAO Treaty.

However, saving, re-using and exchanging seeds among farmers for non-commercial use is subject to national implementation of the **farmers’ exemption clause**. Under Art.15, the breeder’s right shall not extend to acts done privately and for non-commercial purposes and acts done for experimental purposes.

¹¹⁰ Ch. Smith, S. H. Bragdon, *The relationship between intellectual property rights and small-scale farmer innovation*, (Quaker United Nations Office, Geneva, 2016), p. 19.

4. FAO Committee on World Food Security¹¹¹

4.1. Introduction

The Committee on World Food Security (CFS) was established in 1974 as the UN intergovernmental body to serve as a forum for review and follow-up of food security and nutrition policies, including production and physical and economic access to food. It is made up of Members, Participants and Observers, currently comprising 139 Member States.

MEMBERSHIP STATUS

Peru	Kenya	India	China
✓	✓	✓	✓

In 2009, the CFS underwent reform aimed at increasing its legitimacy as a decision-making body for global governance of food security by including a wider range of stakeholders. The vision of the reformed CFS is to be the most inclusive international and intergovernmental platform for all stakeholders to work together to ensure food security and nutrition for all and to strive for a world free from hunger where countries implement the Voluntary guidelines for the progressive realisation of the right to adequate food in the context of national food security adopted by the FAO Council.¹¹²

4.2. Structure

The CFS is composed of the Bureau, Advisory Group, the Plenary, the High Level Panel of Experts (HLPE) and the Secretariat. The Bureau is the executive arm of the CFS. It is made up of a Chairperson and twelve member countries.¹¹³ The Advisory group helps the Bureau advance the Committee's objectives, in particular to ensure linkages with different stakeholders at regional, sub-regional and local levels, and ensure an ongoing, two-way exchange of information. It includes representatives from the 5 different categories of CFS Participants. These are:

- UN agencies and other UN bodies;
- Civil society and non-governmental organisations, particularly organisations representing smallholder family farmers, fisherfolks, herders, landless, urban poor, agricultural and food workers, women, youth, consumers and indigenous people;
- International agricultural research institutions;
- International and regional financial institutions such as the World Bank, the IMF, regional development banks and the WTO;
- Private sector associations and philanthropic foundations organised in the Private Sector Mechanism.

During the reform of the CFS, Member States recognised the right of Civil Society Organisations to autonomously establish a global mechanism for food security and nutrition which will function as a facilitating body for CSO/NGOs consultation and participation in the CFS, even if only Member States can vote and take decisions in the Committee, the principle of subsidiarity (i.e. that decisions are taken at the lowest appropriate level) is recognised and CSOs can be involved as full participants.

¹¹¹ www.fao.org/cfs/en/.

¹¹² Global Strategic Framework for Food Security & Nutrition (GSF), Fifth Version – 2016, p.5.

¹¹³ Members 2015-2017: Afghanistan, Argentina, Bangladesh, Côte d'Ivoire, China, Ecuador, Egypt, Iceland, Italy, Morocco, New Zealand, USA.

Civil society organisations have the right to:

- Take part in the work of the CFS and contribute regularly to inter-sessional activities at all levels;
- Intervene in the Plenary and breakout discussions;
- Contribute to the preparation of meeting documents and agendas.

Civil society organisations can organise themselves through the global **Civil Society Mechanism** (CSM).¹¹⁴ Its work is facilitated by the Coordination Committee which is comprised of 41 Members from 11 constituencies (key stakeholder groups) and 17 sub-regions worldwide. Small-scale farmers make up the largest constituency in the Coordination Committee, as they represent the majority of the world's hungry people and produce most of the world's food. The purpose of the CSM is to facilitate civil society participation in agriculture, food security and nutrition policy development at national, regional and global levels in the context of the CFS.

The Plenary session of the CFS is held annually in October. It is the central body for decision-taking, debate, coordination, lesson-learning and convergence by all stakeholders at a global level on food security issues. The 43rd CFS session took place in October 2016 and it addressed topics such as “sustainable agricultural development for food Security and nutrition, including the role of livestock”, “connecting smallholders to markets”, “urbanisation, rural transformation and implications for food security and nutrition”; and CFS Engagement in Advancing the 2030 Agenda for Sustainable Development. During CFS43, the CSM organised a side event, a dialogue on common pathways to address agroecology and GRs and even proposed a topic for the 2018 HLPE Report – “Agroecology for Food Security and Nutrition” – but, eventually, the CFS chose another topic focused on multi-stakeholder partnerships to finance food security and nutrition.¹¹⁵

The CFS Secretariat includes members from WFP, FAO and IFAD. Its task is to support the Plenary, the Bureau and Advisory Group and the HLPE in their work.

The HLPE was created in 2009 during the reform to revitalise the Committee. Its functions are as follows:

- To assess and analyse the current state of food insecurity and malnutrition and its underlying causes;
- To provide scientific and knowledge-based analysis and advice on specific policy-relevant issues, utilising existing high-quality research, data and technical studies;
- To identify emerging issues, and help members prioritise future actions and attentions on key focal areas.

The HLPE has two components:

- A Steering Committee made up of internationally recognised experts in a variety of food security and nutrition related fields. Upon request of the CFS Plenary or Bureau, it provides scientifically sound, comprehensive, clear and concise written reports/analyses on specific subjects for consideration at CFS Plenary sessions or inter-session meetings or activities.
- Project Teams which act on a project-specific basis and analyse and report on issues related to food security and nutrition. The Teams prepare the draft reports under the Steering Committee.

¹¹⁴ <http://www.csm4cfs.org/>.

¹¹⁵ CSM Annual Report 2015/2016, p. 22: http://www.csm4cfs.org/wp-content/uploads/2017/02/EN-CSM_Annual-web.pdf.

4.3. Genetic resources and climate change

In 2012, the HLPE published a report on **Food Security and Climate Change**,¹¹⁶ in which it recommends increasing resilience of food systems to climate change by facilitating greater agrobiodiversity in the field and giving farmers broader access to GRs. It puts forward that “efficient adaptation will require access [of farmers] (both physical and legal through appropriate intellectual property rules) to GRs, both of existing crops [...] and their wild relatives, as well as varieties that may be used in the future”. It recommends that food producers, public and private sector institutions, research communities, and governments identify and share crop genes for drought and flood tolerance. It also calls for urgent implementation of its Articles 5 (conservation), 6 (sustainable use) and 9 (farmers’ rights) of the FAO Treaty.

4.4. The Global Strategic Framework (GSF)¹¹⁷

The fifth version of the **Global Strategic Framework on Food Security and Nutrition**¹¹⁸ was approved at the 43rd Plenary session of the Committee in October 2016.¹¹⁹ Its purpose is to improve coordination and guide synchronised actions by a wide range of stakeholders. It is not a binding document, but it provides an overarching framework and a single reference document with practical guidance on core recommendations for food security and nutrition strategies, policies and actions. The GSF adopts a human rights perspective to food security and recognises the right to adequate food as established by Article 11 of the International Covenant on Economic, Social and Cultural Rights.

The GSF outlines the following emerging challenges in food security that will need to be addressed:

- Meeting the food and nutritional needs of growing urban and rural populations, with changing dietary preferences;
- Increasing **sustainable agricultural production** and productivity;
- Enhancing **resilience to climate change**;
- Finding sustainable solutions to the increasing competition for **natural resources**.

The GSF recognises the importance of local knowledge in promoting food security, particularly as the latter is influenced by the capacity to manage natural assets and biodiversity and to adapt to the localised impact of climate change. It encourages States, international organisations and all other relevant stakeholders to:

- Encourage secure and equitable access to, and sustainable use of, natural resources, including land, water and biodiversity, for women and men without distinction;
- Support the conservation of, access to, and fair and equitable sharing of, the benefits arising from the use of GRs, in accordance with national law and international agreements;
- Promote more sustainable agriculture that improves food security, eradicates hunger, and is economically viable, while conserving land, water, plant and animal GRs, biodiversity and ecosystems, and enhancing resilience to climate change (*i.e. agro-ecology – author’s note*);
- Consider an ecosystem approach in agricultural management in order to achieve sustainable agriculture, including **traditional and indigenous strategies to cope with climate change** that promote agro-ecosystem diversification and soil carbon sequestration;

¹¹⁶ http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-3-Food_security_and_climate_change-June_2012.pdf, p. 16.

¹¹⁷ CFS 2016/43/13.

¹¹⁸ <http://www.fao.org/3/a-mr173e.pdf>.

¹¹⁹ CFS, Forty-third Session, “Making a Difference in Food Security and Nutrition”, CFS 2016/43 REPORT, para. 34: <http://www.fao.org/3/a-ms023e.pdf>.

- Invite the FAO Commission on GRFA to continue and strengthen its work on climate change and GRs including conservation and use of GRs for adaptation to climate change;
- Promote smallholders' ability to access, breed, produce, conserve, purchase, exchange, sell and use the seeds they need, including local, indigenous and modern varieties;
- Strengthen information and knowledge sharing related to practical on-farm implementation and **foster local innovation**;
- Support *in situ* and *ex situ* conservation and development of agricultural biodiversity by smallholders together with research and extension systems, in line with sustainable agricultural development and good practices, including through agro-ecological approaches;
- Strengthen **participatory research** by combining farmers' and indigenous people's traditional knowledge with the findings of scientific research;
- Promote investment and **innovations based on traditional** and scientific **knowledge** to reduce food losses and waste, considering various sustainable agriculture approaches;
- Facilitate, as appropriate, **participation** of all stakeholders in food security policies and programmes to address climate change recognising the contribution of all farmers and food producers, especially small-scale producers, to food security, by:
 - encouraging multi-stakeholder fora at local, national and regional levels to promote broad participation of **local communities** and the most vulnerable groups, as well as the private sector, in decision-making processes;
 - supporting CSOs, notably those representing the most hunger-affected populations and small-scale producers' organisations, to participate in decision making and the implementation of food security policies and programmes to address climate change.

The GSF encourages the international community to consider and examine the impact of intellectual property regimes on agriculture, food security and nutrition.

4.5. Responsible Agricultural Investment (RAI) Principles

The CFS Principles for Responsible Investment in Agriculture and Food Systems (Rai) (2014), acknowledge that the starting point for defining how responsible investment in agriculture and food systems can contribute to food security and nutrition is the recognition and respect for human rights. They are a set of ten principles that apply to all types of agricultural investment including fisheries, forests and livestock. They address all stakeholders and apply to all stages of the value chain. As a soft law instrument, they are globally applicable and include actions to address a range of environmental, social and economic issues. The objective of the Principles is to promote responsible investment in agriculture and food systems that contribute to food security and nutrition, thus supporting the progressive realisation of the right to adequate food in the context of national food security.

Principle 7: "Respect cultural heritage and TK and support diversity and innovation", including genetic diversity. This includes respecting cultural heritage sites and systems, recognising the contribution of farmers especially smallholders in centres of origin and diversity, in conserving, improving, and making available genetic resources, including seeds; and respecting their rights, to save, use, exchange, and sell these resources.¹²⁰

Next meetings

- CSM Forum: October 2017, Rome
- CFS 44: October 2017, Rome

¹²⁰ <http://www.fao.org/3/a-au866e.pdf>

5. Commission on Genetic Resources for Food and Agriculture (CGRFA)¹²¹

5.1. Introduction

The FAO Commission on Genetic Resources for Food and Agriculture (GRFA) was established in 1983. It is an intergovernmental forum for discussion of issues related to the **conservation and sustainable use** of the components of biodiversity of relevance to food and agriculture. Currently, 178 countries and the EU are members.

MEMBERSHIP STATUS

Peru	Kenya	India	China
✓	✓	✓	✓

The Commission's aims are to:

- coordinate and monitor policy, sectoral and cross-sectoral matters related to the conservation and sustainable use of genetic resources of relevance to food and agriculture;
- reach international consensus on policies and programmes for the conservation, sustainable use and access to GRFA and the fair and equitable sharing of benefits derived from their use;
- monitor the state of the world's GRFA;
- contribute to the strengthening of national and regional policies on biodiversity for food and agriculture and promote cooperation in capacity-building;
- maintain and strengthen cooperation and partnerships on biodiversity for food and agriculture.

5.2. The role of the Commission

Since its establishment, the CGRFA has overseen global assessments of the state of the world's plant and animal GRFA and negotiated major international instruments and policies, including the FAO Treaty (2001), the Global Plan of Action for the Conservation and Sustainable Utilization of PGRFA, the Programme of Work on Climate Change and GRs (2013-2017). The Commission produces codes of conduct and guidelines, such as the Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning and the Voluntary Guide for National Seed Policy Formulation.

The CGRFA facilitates and oversees cooperation between FAO and other international governmental and non-governmental bodies dealing with the conservation and sustainable use of GRs. The CGRFA and the Governing Body of the FAO Treaty cooperate to identify priority actions for the future. The Governing Body encouraged the FAO Treaty Secretariat to cooperate with the CGRFA in the preparation of the *Third Report on the State of the World's PGRFA* and to develop the *Third Global Plan of Action for PGRFA* on the basis of the Report findings. The FAO Treaty Secretariat and the CGRFA work together on issues related to access and benefit sharing in PGRFA. The Secretariats of the two bodies are going to hold a joint global workshop on Access and Benefit-sharing for GRFA in the

¹²¹ <http://www.fao.org/nr/cgrfa/en/>.

biennium 2016/2017, aiming to raise awareness and to facilitate the exchange of experiences amongst policy-makers and stakeholders from different sub-sectors on this issue.¹²²

The Secretariat of the Commission and the CBD are engaged in the “Joint Work Plan of the Secretariats of the Convention on Biological Diversity and of the Food and Agriculture Organization of the United Nations and its Commission on Genetic Resources for Food and Agriculture, Phase 2 (2011-2020)” whose aims are the enhancement of synergies in the implementation of the Commission’s Multi-Year Programme of Work and the CBD’s programme of work. The issue of climate change and genetic resources for food and agriculture is one of five areas of focus of the Joint Work Plan; particularly interesting is the analysis of the experiences in conservation and sustainable use of GRFA to build resilience and adaptation to climate change.¹²³

5.3. Structure

The Commission normally holds one regular session each biennium. Its meetings are open to observers from members and associate members that are not members of the Commission, from States that are not members or associate members of the FAO, and from international organisations, research centres and NGOs. The Secretariat monitors and coordinates the preparations of the Commission meetings and the work of the Sectoral Working Groups.

The Commission established 4 Sectoral Working Groups dealing with animal, plant, aquatic and forest GRFA. The purpose of these working groups is to review the situation and issues related to agrobiodiversity in the areas under their respective competences, to advise and make recommendations to the Commission on these matters, and to consider the progress made in implementing the Commission’s programme of work.

The Working Group, meeting once every 2 years,¹²⁴ may invite experts, as well as representatives of specialised international organisations, to attend its meetings. Until now the observers that participated in the meetings of the WG on Plant and genetic Resources are mainly international organisations like UPOV, Biodiversity International, Global Crop Diversity Trust, International Treaty, FAO, representatives of the private sector like the International Seed Federation, the CGIARs, and a very small number of NGOs.

The Commission also established two subsidiary bodies. In 2011, it established the *Ad Hoc Technical Working Group on ABS for GRFA* to identify key issues of different sectors for genetic resources, to develop options to guide countries in developing legislative, administrative and policy measures and to analyse possible modalities to address ABS, taking into account the Nagoya Protocol, CBD and the FAO Treaty. Moreover, in 2013, the Commission established a *Team of Technical and Legal Experts on Access and Benefit-sharing*, which consists of up to two representatives from each region. The Expert Team met twice in 2014 and prepared *Elements to Facilitate Domestic Implementation of ABS for Different Subsectors of GRFA*.

5.3.1. Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture (including the global network for *in situ* conservation)

At its 8th session in June 2016, the WG discussed the implications of establishing one or two separate **networks for *in situ* conservation** and **on-farm management** of PGRFA.¹²⁵ The WG highlighted the importance of *in situ* conservation as opposed to *ex situ* conservation in genebanks due to the fact that genebanks are unable to conserve all types of plant populations relevant for food and agriculture, as

¹²² IT/GB-6/15/18; Resolution 09/2015. The workshop has not been scheduled yet.

¹²³ CGRFA-13/11/Inf.11, website <http://www.fao.org/nr/cgrfa/cgrfa-meetings/cgrfa-comm/thirteenth-reg/en/>.

¹²⁴ E.g. the next meeting of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture should be held in 2018.

¹²⁵ Global networking on *in situ* conservation and on-farm management of plant genetic resources for food and agriculture (CGRFA/WG- PGR-8/16/Inf.2): <http://www.fao.org/3/a-bl786e.pdf>.

some live only in the wild or in farmers' fields and are adapted to local climatic conditions.¹²⁶ The establishment of a global networking mechanism would improve coordination of scattered national and regional conservation initiatives.¹²⁷ The WG prefers the creation of a single unified global network with the over-riding goal of promoting the conservation of PGRFA currently outside of the mandates of genebanks, as it would be a less costly and more efficient solution.

The WG proposes the following **potential functions** of the network(s), irrespective of whether structured as one or two separate mechanisms: awareness-raising, exchange and standardisation of information, facilitating partnerships, coordination and implementation of evidence-based interventions and mainstreaming the conservation of PGRFA in nature reserves.¹²⁸ These functions should be reflected in both short- and long-term activities of the network(s), e.g. promoting **community-based** and participatory **research** "to identify conservation practices to be deployed at local levels"; supporting access to innovative technology to "identify varieties with climate-adapted traits".¹²⁹ Although the functions may vary with regard to *in situ* conservation of wild GRs and on-farm management of PGRFA, WG supports the creation of a single network which, in its view, will provide better linkages between the conservationists and the users of the conserved materials (farmers and plant breeders).¹³⁰

In order to efficiently fulfil its functions, the network(s) should be well **structured**, ensuring broad, decentralised participation of global, regional and national stakeholders from the private and public sectors, the academia and civil society. Although the document does not directly refer to communities, it explicitly encourages the involvement, at national level, of stakeholders directly responsible for *in situ* conservation or on-farm management.¹³¹ Moreover, "all potential members and participants, including governmental as well as nongovernmental organisations, farmers and breeders, international partner organisations as well as the private sector, **indigenous and local communities**, and civil society organisations" should be involved in the decision-making process related to the very early stages of the establishment of the networking mechanism(s).¹³² The global network will strengthen already existing national organisations, frameworks and networks instead of creating new ones.¹³³ The WG which prefers a single network from the perspective of structure, suggests that the global network should start in the form of a "community of practice" comprising various stakeholders for the period of up to five years.¹³⁴

Given the huge number and diversity of stakeholders to be involved in the day-to-day work of the network, it is necessary to clearly define its **governance** options, i.e. modes of interaction and decision-taking of stakeholders. The WG proposes to establish a **Facilitation Committee**, composed of selected members (various stakeholders, including scientists and farmers/communities) from the initial "community of practice", international organisations and research institutes, which will convene the first "community of practice", prepare the work plan and coordinate its activities. The Facilitation Committee should later be replaced by a permanent **Secretariat** with administrative, support and expert roles. A **Governing Body**, consisting of delegated representatives or experts from participating entities, could be established to oversee the work of the global network. According to the WG, governance of a unified global network would be more efficient than separate governance of two separate networks.¹³⁵

An informal **multi-stakeholder dialogue** organised by FAO took place in June 2016 to devise the modalities for establishing the global network. The **concept note on "Global networking on *in situ*"**

¹²⁶ Paras. 6, 7.

¹²⁷¹²⁷ Paras. 12, 13.

¹²⁸ Paras. 17, 18.

¹²⁹ Para. 19.

¹³⁰ Para. 20.

¹³¹ Paras. 22-24. This global network is an opportunity for farmers and local communities like the Potato Park to get involved in the establishment and work of the network.

¹³² Para. 14.

¹³³ Paras. 25, 26.

¹³⁴ Para. 28.

¹³⁵ Paras. 30, 31, 34, 36.

conservation and on-farm management of PGRFA” was updated accordingly¹³⁶ and discussed at the 16th session of the Commission. The stakeholders participating in the Dialogue expressed a clear preference for a common network.¹³⁷ It was agreed that the network should be devoid of any formal legal status and that network members should collaborate “on the basis of common objectives and agreed functions and activities of the network”.¹³⁸ The inaugural session of the network should be convened immediately prior to the 9th meeting of the WG PGRFA to decide on the goals and functions, governance, structure, management, partnerships and funding of one single Global Network.¹³⁹ A **“Draft call for establishing a Global Network on *In Situ* Conservation and On-Farm Management of Plant Genetic Resources for Food and Agriculture”** based on the assumption of creation of a common networking mechanism was annexed to the updated concept note. The draft call emphasises the need for a broad participation of relevant stakeholders, including farmers and ILCs.¹⁴⁰ The Multi-Stakeholder Dialogue identified a possible goal of the network to “contribute to the implementation of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture and the achievement of Sustainable Development Goal Target 2.5 by strengthening on-farm management and *in situ* conservation and sustainable use of plant genetic resources for food and agriculture, taking into account the complementarity of different *in situ* and *ex situ* conservation approaches and the need to balance them”.¹⁴¹ This text should serve as a basis for negotiations of the goal at the first meeting of the Network.

The potential functions and activities of the Network, as identified at the Multi-stakeholder Dialogue, include:¹⁴²

- Taking action in support of the role and important contribution of **farmers and IPLCs** to the conservation of PGRFA;
- Raising awareness about, and increase visibility of, the importance of *in situ* conservation and on farm management of PGRFA to policy makers at the national and international levels;
- Sharing knowledge, experiences and information within the network and with others on a voluntary basis;
- Increasing collaboration among stakeholders;
- Providing and coordinating capacity building opportunities;
- Influencing policy development and facilitating participation of stakeholders in policy development and decision-making at national, regional and international levels;
- Reinforcing the implementation of **Farmers’ Rights**;
- Providing the platform for dialogue on an **equal footing** among stakeholder groups;
- Connecting and strengthening existing stakeholders, projects and networks;
- Promoting the monitoring of trends;
- Mobilising resources; and

¹³⁶ The updated concept note was posted as “CGRFA-16/17/Inf.20” (together with the summary of the outcomes from the 2016 multi-stakeholder dialogue as “CGRFA-16/17/Inf.21”) at this website: <http://www.fao.org/nr/cgrfa/cgrfa-meetings/cgrfa-comm/sixteenth-reg/en/>.

¹³⁷ Global Networking on *In Situ* Conservation and on Farm Management of Plant Genetic Resources for Food and Agriculture, CGRFA-16/17/Inf.20, Information document, para. 11: <http://www.fao.org/3/a-mr801e.pdf>

¹³⁸ Para. 16.

¹³⁹ Para. 3.

¹⁴⁰ Annex to CGRFA-16/17/Inf.20, para. 9.

¹⁴¹ Report of the Informal Multistakeholder Dialogue on Global Networking on *In Situ* Conservation and On-farm Management of Plant Genetic Resources for Food and Agriculture, CGRFA-16/17/Inf.21, Annex II: <http://www.fao.org/3/a-mr800e.pdf>; CGRFA-16/17/Inf.20, Annex I, paras. 13-14.

¹⁴² CGRFA-16/17/Inf.21, Annex II; CGRFA-16/17/Inf.20, Annex I, para. 15.

- Defining areas of work, work programme and clusters of work

With regard to the management of the Network, its meetings should be held together with other relevant meetings, such as the meetings of the Commission's WG.¹⁴³

5.4. The Second Report on the State of the World's PGRFA (2010)

This is a worldwide assessment of the current status of plant genetic diversity and capacities at the local and global levels for *in situ* and *ex situ* management, conservation and use of plant genetic resources. It is based on information gathered from more than 100 countries, as well as from regional and international research community, the private sector and civil society. The aim of the Report is to identify gaps, constraints, and emergency situations and allow the Commission to recommend priorities and actions and update the Global Plan of Action. The Report highlights the necessity of expanding farmer participation in plant breeding programmes and facilitating their access to seeds.¹⁴⁴

5.5. The Second Global Plan of Action for PGRFA (SGPA, adopted in 2011 without any specific end date)¹⁴⁵

In 2011, the FAO Council adopted the Second Global Plan of Action on PGRFA without specifying the end date. It was prepared by the Commission by updating the First Global Plan of Action in light of the Second Report on the State of the World's PGRFA. It recognises as threats to conservation and sustainable use of PGRFA the substitution of farmers' varieties by industrial ones, overexploitation of lands, overgrazing, changing of agricultural systems, changing dietary habits, environmental degradation and climate change.

The Second Global Plan of Action on PGRFA recognises the central role of farmers' and indigenous' local varieties for achieving conservation and resilience of PGRFA in the face of climate change.¹⁴⁶ It is structured in 18 priority activities which are organised in 4 main groups: *in situ* conservation, *ex situ* conservation, sustainable use and building sustainable institutional and human capacities. Proposed activities relevant for the SIFOR project are as follows:

Main Group	Policy/Strategy under Priority Activities
<i>In situ</i> conservation and management	Priority activity (PA) 1: Surveying and inventorying PGRFA <ul style="list-style-type: none"> • Survey and inventory should be the first step for conservation; • Local and indigenous knowledge should be recognised as an important component of survey and inventory and carefully documented with the prior informed consent of indigenous and local communities.
	PA2: Supporting on-farm management and improvement of PGRFA <ul style="list-style-type: none"> • Achieve a better balance and integration between <i>ex situ</i> and <i>in situ</i> conservation; • Disseminate best practices on conservation and sustainable use of PGRFA that support and maintain the social, economic and cultural values of local and indigenous communities and improve the quality of life by involving such communities in all aspects of managing and improving PGRFA on farm; • Realise Farmers' Rights;

¹⁴³ CGRFA-16/17/Inf.21, Annex II; CGRFA-16/17/Inf.20, Annex I, para. 16.

¹⁴⁴ Chapter 4.6.2, pp. 106-107; Chapter 7.6, p. 176.

¹⁴⁵ <http://www.fao.org/docrep/015/i2624e/i2624e00.pdf>.

¹⁴⁶ Paras. 166, 190.

- Integrate CWR and landrace conservation into existing conservation strategies;
- Support **community-based organisations** and user groups engaged in providing practical assistance to on farm conservation and improvement work;
- To support on-farm improvement activities, gene banks, networks and national and international organisations should identify appropriate farmers' varieties/landraces for multiplication and/or for developing new breeding populations that incorporate specific traits into locally adapted materials;
- Research should be carried out on crop improvement, including **participatory breeding**, as means of increasing crop yields;
- Further ethnobotanical and socio-economic/sociocultural research to understand and analyse farmers' knowledge, selection/breeding, use and management of PGRFA, consistent with the approval of the farmers involved and with applicable requirements for protection of their knowledge and technologies.

PA4: Promoting *in situ* conservation and management of crop wild relatives and wild food plants

- Governments should note the **interrelationship between genetic resources and TK**, their inseparable nature for indigenous and local communities, the importance of TK for PGRFA and for the sustainable livelihoods of these communities, especially in protected areas, according to national legislation;
- Governments should support efforts by **indigenous and local communities** to manage CWR and wild food plants, their classification and promote ILC participation in decision making;
- Governments should encourage **indigenous and local communities** to conserve and manage CWR and wild food plants and provide for their **participation** in decisions relating to local conservation and management;
- Research should be carried out on *in situ* management of CWR and wild food plants.

***Ex situ* conservation**

PA5: Supporting targeted collecting of PGRFA

- The provision of farmers' varieties/landraces for the purpose of *ex situ* collection should be subject to the **prior informed consent** and it should respect the **knowledge of indigenous and local communities** regarding the conservation and sustainable use of biological diversity. However, the policy does not extend to other rights.

Sustainable Use

PA9: Supporting plant breeding, genetic enhancement and base-broadening efforts

- Governments, international and non-governmental organisations, and funding sources should support **participatory plant breeding** by encouraging partnership between public-private sector and farmers in breeding activities; by developing policies and legislation enhancing PPB, including appropriate regulatory frameworks for varieties developed through participatory plant breeding; by encouraging the institutionalisation of PPB as part of national PGRFA strategies; and by improving access by plant breeders to the widest possible genetic diversity in order to identify the traits needed for developing crop varieties adapted to novel climatic conditions.
-

- Research is needed to develop selection procedures and breeding methods that support base broadening and improve sustainability at the same time as enhancing productivity.

PA10: Promoting diversification of crop production and broadening crop diversity for sustainable agriculture

- Promote sustainable agriculture through diversification among and within crops;
- A broader range of crop varieties and species will need to be incorporated into agricultural systems;
- Governments and national agricultural research systems, should:
 - a) increase their capacity to develop and use multilines, mixtures and synthetic varieties;
 - b) increase their capacity to adapt different integrated pest management strategies to production systems;
 - c) develop strategies for the deployment and use of a range of varieties;
 - d) strengthen the ability of farmers, indigenous and local communities and their organisations, as well as extension workers and other stakeholders, to manage agricultural biodiversity and ecosystem services sustainably.

PA11: Promoting development and commercialisation of all varieties, primarily farmers' varieties/landraces and underutilised species

- Promote policies that will serve for the crop diversification and the creation of market for underutilised species;
- Promote the creation of an enabling environment for local and export markets for traditional and new products originating from plant varieties, especially farmers' varieties;
- Foster public–private partnerships and put in place legislation to promote benefit sharing targeting farmers and traditional custodians.

PA12: Supporting seed production and distribution

- Governments should develop appropriate policies that provide an enabling environment for the development of **different seed systems**;
 - Strengthen links between gene banks, networks, plant breeding organisations, seed producers and small-scale seed production and distribution enterprises to ensure wide use of available germplasm;
 - Improve the linkages between breeders' and farmers' organisations and seed producers (public or private) so that farmers can access high-quality seed of the varieties they need;
 - Provide training and infrastructural support to farmers on seed technology and conservation in order to improve the physical and genetic quality of seeds;
 - Adopt legislative measures that create adequate conditions for deploying all varieties, primarily farmers' varieties/landraces and underutilised species, in different seed systems;
 - Develop approaches for supporting small-scale, **farmer-level seed distribution**, drawing on the experiences of community and small-scale seed enterprises already established in some countries.
-

SGPA SUMMARY

	SUPPORT	GAPS
TK	Priority activities 1, 4, 5	<ul style="list-style-type: none"> Governments are encouraged only to “note” the importance of TK and not to protect it.
Seeds	Priority activities 4, 10, 11, 12	<ul style="list-style-type: none"> Stress on the development of models for diversified production that are consistent with higher productivity and stability as well as meeting consumer preference. No mention of farmer-to-farmer exchange of seeds.
Culture	Priority activity 2	<ul style="list-style-type: none"> Despite the recognition of the link between GRs and TK, there is limited recognition of the link between landscapes and local values and customary laws.
Rights	Priority activity 2	<ul style="list-style-type: none"> Assertion of the view that farmers cannot grow their own traditional varieties and landraces in changed climates, and they will therefore need access to new germplasm.
Participation	Priority activities 2, 4	<ul style="list-style-type: none"> Little attention is paid to the participation of farmers in decision-making processes (only in relation to <i>in situ</i> conservation).
Innovation	Priority activities 2, 9	<ul style="list-style-type: none"> Call for improvement of access by plant breeders to the widest possible genetic diversity. No mention of protection of IPRs of farmers and indigenous people participating in PPB. Focus on modern varieties rather than on traditional, locally-adapted ones (in relation to sustainable use).

5.6. Programme of Work on Climate Change and GRFA (2013-2017)¹⁴⁷

The PoW was adopted at the 14th Session of the Commission in 2013 and revised at its 15th Session in 2015. Its objectives are to: (i) “promote the understanding of the roles and importance of GRFA in food security and nutrition and in ecosystem function and system resilience in light of climate change”; and (ii) “provide technical information to enable countries to understand the role of genetic resources for food and agriculture in climate change mitigation and adaptation”. The main activities of the PoW included participation in the work of the UNFCCC and CBD subsidiary bodies and organisation of side events at UNFCCC and CBD COP meetings in order to raise awareness. A report on progress in the implementation of the PoW was submitted to the Commission at its 16th Session in 2017.¹⁴⁸ The report pinpoints some activities which were or were not carried out under the PoW. For example, information obtained through other activities of the Programme of Work contributed to the development of the Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning. The Commission invited countries to implement the Voluntary Guidelines and to integrate diversity of GRFA into national climate change planning, addressing their potential for adaptation to climate change and for climate change mitigation, including in line with their respective nationally determined contributions and national adaptation plans. Moreover, the FAO developed, on

¹⁴⁷ <http://www.fao.org/3/a-bl009e.pdf>.

¹⁴⁸ Review of the Programme of Work on Climate change and Genetic Resources for Food and Agriculture, CGRFA-16/17/8: <http://www.fao.org/3/a-mr404e.pdf>.

the basis of the work of the PoW, a publication entitled “*Coping with climate change - The roles of genetic resources for food and agriculture*”.¹⁴⁹ However, workshops on the integration of GRFA into adaptation planning were never organised due to a lack of resources.

With regard to the future work on climate change and GRFA, a country-driven global assessment of the effects of climate change on the conservation and sustainable use of GRFA should be carried out, taking stock of measures taken by the different sectors to cope with climate change. The Commission requested the Secretariat to prepare a proposal for the preparation of the global assessment of the role of GRFA in adaptation to and mitigation of climate change, for consideration by the Commission at its 17th session in 2019. Furthermore, the Commission decided to integrate the work on climate change into the Strategic Plan for the Commission on Genetic Resources for Food and Agriculture (2018-2027)¹⁵⁰

5.7. The Fifteenth Regular Session of the Commission (January 2015)¹⁵¹

During its Fifteenth Regular Session (January 2015), the Commission reviewed the implementation of the SGPA on PGRFA and considered *the Status of preparation of The State of the World's Biodiversity for Food and Agriculture*¹⁵², *Elements to Facilitate Domestic Implementation of Access and Benefit-Sharing for Different Subsectors of GRFA*, *Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition* and *Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning*. It also endorsed the *Voluntary Guide for National Seed Policy Formulation* and the outline of *The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture* which should be presented at the 18th Session of the Commission in 2020/2021.¹⁵³

5.7.1. Elements to Facilitate Domestic Implementation of Access and Benefit-Sharing for Different Subsectors of GRFA¹⁵⁴

These guidelines were approved by the FAO Conference in 2015. They aim to assist governments considering developing, adapting or implementing legislative, administrative or policy measures for ABS, to take into account the importance of GRFA, their special role for food security and the distinctive features of the different subsectors of GRFA, while complying with international ABS instruments (CBD, Nagoya Protocol, ITPGRFA). Pursuant to para. 41, national measures should address how **PIC** or approval and involvement of the indigenous and local communities may be obtained, taking into consideration indigenous and local communities' **customary laws**, community protocols and procedures. Under para. 52, **the exchange of GRs** within and among local and indigenous communities and small-scale farmers may be exempted from any access requirement and the ABS measures as such. Moreover, the Annex (part C) recognises the essential role of cross-border exchange of PGRFA. Para. 63 obliges governments to take measures to ensure that TK associated with GRs is accessed with the PIC or approval and involvement of the indigenous and local communities holding such TK irrespective of whether GRs are being made available at the same time. The Annex (part D) recognises that “the innovation process for GRFA is usually of incremental nature and the result of contributions made by many different people, including indigenous and local communities, farmers, researchers and breeders”.

¹⁴⁹ <http://www.fao.org/3/a-i3866e.pdf>.

¹⁵⁰ Report of the Sixteenth Regular Session of the Commission on Genetic Resources for Food and Agriculture, CGRFA-16/17/Report, paras. 26-31:

<http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/CGRFA-16/ms565.pdf>.

¹⁵¹ <http://www.fao.org/3/a-mm660e.pdf>.

¹⁵² To be submitted for consideration at the 16th Session of the Commission in January 2017.

¹⁵³ <http://www.fao.org/3/a-mm181e.pdf>.

¹⁵⁴ <http://www.fao.org/3/a-i5033e.pdf>.

5.7.2. Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition¹⁵⁵

They aim to support countries to integrate biodiversity into all relevant policies, programmes and national and regional plans of action in view of addressing malnutrition in all its forms, and to specifically promote the knowledge, conservation, development and use of varieties, cultivars and breeds of plants and animals used as food, as well as wild, neglected and underutilised species contributing to health and nutrition. The Guidelines mention “the unique nutrient composition” of wild, neglected and underutilised varieties.¹⁵⁶

5.7.3. Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning¹⁵⁷

These guidelines were approved by the FAO Conference in 2015 and are available as supplementary material to the National Adaptation Plan (NAP) Technical Guidelines. They aim to: (i) “promote the use of GRs for food and agriculture in climate change adaptation and support their integration into national climate change adaptation planning” (NAP); (ii) “support genetic resources experts and those involved in climate change adaptation to identify and address the challenges and opportunities of GRFA in adaptation”;¹⁵⁸ and (iii) “promote the involvement of genetic resources stakeholders in the national climate change adaptation planning process”. The guidelines recognise the significant role of **TK** in the identification of adaptation options and the importance of its collection for adaptation purposes.¹⁵⁹ Since local practices often constitute an important component of adaptation measures, the identification, assessment and compilation of these practices should be promoted with full participation of indigenous and local communities.¹⁶⁰ They highlight that traditional varieties show the kind of adaptability needed to cope with variable climatic conditions and are adapted to a wider range of often suboptimum production conditions than many modern varieties.¹⁶¹ The guidelines identify Priority Activities of the SGPA which are relevant to coping with climate change:

- Greater emphasis on *in situ* conservation of genetically diverse populations, especially crop wild relatives, to allow evolution to continue and thus permit the continued generation of adaptive traits;¹⁶²
- A significantly expanded programme on *ex situ* conservation, especially of crop wild relatives, to ensure the maintenance of diversity of species, populations and varieties, including those adapted to extreme conditions and those from areas expected to be highly affected by climate change;
- Increased research and improved availability of information on the characteristics of material held *ex situ* that will become useful under new climatic conditions;
- Increased support for access to and movement of PGRFA to meet the greater interdependence of countries resulting from new environmental conditions;
- More support for building capacity in plant breeding and seed-systems management that make effective and sustainable use of PGRFA;
- Targeted and increased involvement of farmers and farming communities in national and local crop-improvement activities, including support for participatory research and **plant breeding**.

¹⁵⁵ <http://www.fao.org/3/a-i5248e.pdf>.

¹⁵⁶ P. 3.

¹⁵⁷ <http://www.fao.org/3/a-i4940e.pdf>.

¹⁵⁸ The document does not specify if GR experts and climate change adaptation experts should work together.

¹⁵⁹ P. 36.

¹⁶⁰ Para.34.

¹⁶¹ P.30.

¹⁶² P. 35.

The guidelines propose the following indicative activities for consideration in implementation plans of the guidelines:

- Develop and implement *in situ* conservation plans for targeted and associated varieties (including wild relatives);
- Identify agro-ecological systems that incorporate high levels of biological diversity and develop and implement mechanisms to maintain them.
- Strengthen **involvement of local communities** in adaptation planning with emphasis on support for use of TK;
- Strengthen **innovation** pathways through improved capacity and accessibility in order to enhance response to climate change (though there is no explicit reference to TK-base innovation);
- Support community programmes for the reintroduction, maintenance and improvement of **traditional varieties**;
- Develop continuing stakeholder involvement programmes and increase participation of all relevant agencies, organisations, societies, civil society groups, communities and producers at all levels.

5.7.4. Voluntary Guide for National Seed Policy Formulation¹⁶³

The guide aims to assist developing countries in formulating effective seed policies, create enabling environments for seed sector development and facilitate access to, and use of, PGRFA. It is intended for use by policymakers, national seed agencies, civil society, and public and private sector organisations, including national seed associations and farmers' organisations involved in the seed sector. It highlights the importance of involving farmers in national seed policy consultations. National policies should cover a broad spectrum of the seed supply chain processes and activities: variety development including conservation and sustainable use of PGRFA, seed production in both formal and informal sectors, seed quality assurance, agricultural extension, seed marketing, seed import and export, seed enterprise development, seed value chain, seed security, capacity building and seed legislation/standards.

Crop variety development

- The seed policy should ensure adequate support for plant genetic conservation activities, and establish strong linkages with variety development by both public and private plant breeders;
- Strategies should facilitate access for public and private plant breeders to materials stored in genebanks, and the adoption of international agreements facilitating germplasm exchange, such as the FAO Treaty and the CBD;
- Commercial utilisation of PGR should be guided by the principles of PIC of farmers as well as fair and equitable benefit sharing with farmers;
- Farmers should be involved in PPB in order to enable them to have easy access to new and adapted varieties.

Seed production

- Seed policies should support informal seed production systems and ensure that farmers can freely save and exchange their own seeds of improved or traditional varieties.

Seed quality assurance

- Farmers should participate in identifying the criteria to define the properties of seeds that could be certified;

¹⁶³ <http://www.fao.org/3/a-i4916e.pdf>.

- One of the regulatory options is the FAO Quality Declared Seed (QDS) system, in which seed-producing farmers are responsible for seed quality and the government plays a monitoring role, e.g. using its extension staff for field inspection.

Agricultural extension

- Stimulating demand for quality seed of improved and other local varieties;
- Promotion of farmers' seed fairs.
- Ensuring that small-scale farmers' have the freedom to save, use, exchange and sell farm-saved seed.

Seed marketing

- The seed policy may consider recognising, supporting and improving the traditional seed exchange mechanism by farmers.

Seed enterprise development

- Creation of a regulatory framework conducive to local seed enterprises, without imposing unduly strict bureaucratic procedures, and establishing a clear policy on intellectual property and farmers' rights;
- In order to formulate appropriate policy measures for seed enterprises, governments should ensure that the private sector and farmers (including small-scale farmers) are adequately consulted and represented on all relevant governing bodies involved in seed sector decision-making.

Seed security

- Producing in favourable areas the seeds of varieties that are adapted to more seed insecure agro-ecological zones.

Capacity building

- Enhancing the capacity of farming communities in seed-related agricultural practices such as seed selection, cleaning and storage of farm-saved seeds, PPB and PVS, through field-based practical training including farm visits.

Seed legislation

- It should be designed and formulated with the full participation of stakeholders (public, private, civil society, farmers);
- Ensure supportiveness between seed laws and phytosanitary protection, plant genetic resources, and biosafety legislation

5.8. The Sixteenth Regular Session of the Commission (January 2017)

During the 16th Session, the Commission discussed the establishment of an international network of *in situ* conservation areas, expressing its preference for a single networking mechanism, as outlined in Part 3.1 above. It also adopted the Report on progress in the implementation of the PoW for climate change and GRFA discussed in Part 6 above.

The Commission welcomed the draft report on ***The State of The World's Biodiversity for Food and Agriculture***¹⁶⁴ and requested the Secretariat to invite Members and observers to **submit comments by 16 June 2018**. The report taking into account various observations is expected to be finalised in the

¹⁶⁴ CGRFA-16/17/Inf.10: <http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/CGRFA-16/mr762rev.1e.pdf>.

second half of 2018.¹⁶⁵ Another opportunity to contribute to the work of the CGRFA is to submit comments on the document ***Biodiversity for food and agriculture – needs and possible actions***¹⁶⁶ by **15 April 2018**.¹⁶⁷ Furthermore, the Commission asked FAO to prepare a **study on the contribution of GRFA to the four pillars of food security** (availability, accessibility, utilisation and stability of food) and to the achievement of relevant SDGs and to invite observers to provide comments **by 31 March 2017**.

The Commission also requested the WG to further review the revised draft ***Voluntary guidelines on national level conservation and use of farmers' varieties/landraces***,¹⁶⁸ which strongly supports the involvement of communities in conservation and sustainable use of farmers' varieties and promotes "good linkages between farmers, community seed banks and genebanks" at local, regional or national level, and invited observers to submit their views **by 1 June 2017**.¹⁶⁹

During the 17th session of the Commission, which will take place in Rome in February 2019, the status and trends of seed policies will be reviewed. The review of the SGPA is expected in 2025 in light of the *Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture* to be issued in 2023.

¹⁶⁵ Report of the Sixteenth Regular Session of the Commission on Genetic Resources for Food and Agriculture, CGRFA-16/17/Report, paras. 12-13:

<http://www.fao.org/fileadmin/templates/nr/documents/CGRFA/CGRFA-16/ms565.pdf>.

¹⁶⁶ CGRFA-16/17/4: <http://www.fao.org/3/b-mr765e.pdf>.

¹⁶⁷ CGRFA-16/17/Report, para. 16.

¹⁶⁸ CGRFA-16/17/Inf.18: <http://www.fao.org/3/b-mr797e.pdf>.

¹⁶⁹ CGRFA-16/17/Report, para. 63.

6. UN Framework Convention on Climate Change

List of acronyms

AC	Adaptation Committee
AF	Adaptation Fund
CAF	Cancun Adaptation Framework
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
COP	Conference of the Parties
GHG	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LEG	LDC Expert Group
LULUCF	Land Use, Land-Use Change and Forestry
NAPs	National Adaptation Plans
NDCs	Nationally Determined Contributions
NWP	Nairobi Work Programme
OECD	Organisation for Economic Cooperation and Development
PA	Paris Agreement
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
UNFCCC	United Nations Framework Convention on Climate Change

This section explores the global climate change policy framework, including the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol (KP), the Paris Agreement (PA) and related initiatives. It outlines relevant provisions on climate change adaptation and human rights and other issues of relevance to the SIFOR project. Being a framework treaty, the UNFCCC provides a general framework of objectives, principles and desired lines of action. On the other hand, the KP and the PA represent more specific protocols to the UNFCCC and determine precise obligations on the part of States Parties.

6.1. The United Nations Framework Convention on Climate Change¹⁷⁰

6.1.1. Main objectives & relevant provisions

The UNFCCC entered into force in March 1994. It has a near-universal membership, currently counting 197 Parties. The objective of the Convention is to **stabilise greenhouse gas (GHG) concentrations** in the atmosphere “at a level that would prevent dangerous anthropogenic interference with the climate system”, “within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to **ensure that food production is not threatened** and to enable economic development to proceed in a sustainable manner.”¹⁷¹ It is legally binding on States which ratified it but it does not have a strong enforcement mechanism, as it specifies only general commitments on the part of States Parties. The Conference of Parties (COP) meets annually – its next meeting will take place in November 2017 in Bonn.

The Preamble of the UNFCCC, which is not legally binding but serves to interpret the Convention text, acknowledges that climate change and its adverse effects are a *common concern of humankind*. It further recognises the vulnerability of developing countries with fragile mountainous ecosystems to the adverse effects of climate change.

¹⁷⁰ <https://unfccc.int/resource/docs/convkp/conveng.pdf>.

¹⁷¹ UNFCCC, Art.2.

Art.3 sets out the guiding **principles** for the implementation of the Convention by obliging Parties to protect the climate system for the benefit of present and future generations of humankind, on the basis of **equity** and in accordance with their common but differentiated responsibilities and respective capabilities, with **developed countries taking the lead**, giving consideration to the specific needs and special circumstances of developing country Parties.¹⁷² The need to ensure sustainable development in order to address climate change is also recognised.

Art.4 defines the **general commitments** undertaken by the Parties. Under Art.4.1, all Parties, according to their common but differentiated responsibilities, are obliged to formulate, implement, publish and update mitigation and adaptation measures and promote the development and transfer of technologies, including in the agricultural sector. Under Art.4.2, only Annex I Parties are obliged to adopt national policies and take corresponding measures on mitigation, by limiting its anthropogenic emissions of GHG, and regularly report to the COP (Art.12). Moreover, Annex II Parties shall financially assist developing countries in adaptation (Art.4.4).

RATIFICATION STATUS OF THE UNFCCC

Peru	Kenya	India	China
✓	✓	✓	✓

6.1.2. Relevant meetings & membership

- SBSTA 46: 8-18 May 2017, Bonn, Germany
 - Item 7: Issues relating to agriculture – continued work on the draft decision proposed by G77 and China and EU
 - Open multi-stakeholder dialogue on the operationalisation of the **Local Communities and Indigenous Platform**
 - Call for Party and non-Party stakeholders' **submissions** on the purpose, content and structure of the platform in order to inform the multi-stakeholder dialogue – deadline **31 March 2017**.¹⁷³
- COP 23/CMP 13/CMA 1.2: 6-17 November 2017, Bonn, Germany

The Convention categorises countries in 3 main groups according to different commitments:

¹⁷² Small island countries; countries with low-lying coastal areas; countries with arid and semi-arid areas, forested areas and areas liable to forest decay; countries with areas prone to natural disasters; countries with areas liable to drought and desertification; countries with areas of high urban atmospheric pollution; countries with areas with fragile ecosystems, including **mountainous ecosystems**; countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and landlocked and transit countries.

¹⁷³ <http://www4.unfccc.int/Submissions/Lists/OSPCallForSubmission/DispForm.aspx?ID=311>.

ANNEX I PARTIES ¹⁷⁴	ANNEX II PARTIES ¹⁷⁵	NON-ANNEX PARTIES ¹⁷⁶
Industrialised countries Members of OECD in 1992 + countries with economies in transition	Industrialised countries Members of OECD in 1992	Developing countries, including the least developed countries (LDCs)

6.1.3. The Bodies of the UNFCCC

The Conference of Parties (COP) is the supreme body of the Convention. Its main tasks include the examination of the Parties' obligations; assessment of the implementation of the UNFCCC; making recommendations on any matters necessary for the implementation of the Convention; establishment and monitoring of subsidiary bodies necessary for the implementation of the Convention and cooperation with competent international organisations and intergovernmental and NGOs. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by the Convention, may be admitted to COP sessions as an observer unless at least one third of the Parties present object (Art.7).

The Secretariat, with permanent seat in Bonn, Germany, makes arrangements for sessions of the COP and its subsidiary bodies (Art.8).

The Subsidiary Body for Scientific and Technological Advice (SBSTA) is a multidisciplinary body, comprising government representatives competent in the relevant field of expertise. It aims to provide assessments of the state of scientific knowledge relating to climate change and its effects; prepare scientific assessments on the effects of measures taken in the implementation of the Convention; identify innovative, efficient and state-of-the-art technologies and know-how and advise on the ways and means of promoting development and/or transferring such technologies (Art.9). Key areas of work for the SBSTA are the impacts, vulnerability and adaptation to climate change; emissions from deforestation and forest degradation in developing countries; and promoting the development and transfer of environmentally-sound technologies. It works closely with the Intergovernmental Panel on Climate Change (IPCC), sometimes requesting specific information or reports from it, and also collaborates with other relevant international organisations that share the common objective of sustainable development. SBSTA meets twice a year. NGOs may submit their observations on various issues, including agriculture, to the SBSTA in response to calls which are published on the UNFCCC website.¹⁷⁷

The Subsidiary Body for Implementation (SBI) assists the COP in the assessment and review of the effective implementation of the Convention (Art.10).

The Adaptation Committee (AC) was established under the Cancun Agreements at COP16 to promote the implementation of enhanced action on adaptation. It meets twice a year – in spring and in autumn; its next meeting to be held on 19-22 September 2017. Its principal tasks consist of providing technical support and guidance to the Parties; sharing of relevant information, knowledge, experience and good practices; promoting synergy and strengthening engagement with national, regional and international organisations, centres and networks; providing information and recommendations, drawing on

¹⁷⁴ Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, EU, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, USA.

¹⁷⁵ Australia, Austria, Belgium, Canada, Denmark, EU, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, USA.

¹⁷⁶ Incl. Kenya, Peru, India and China.

¹⁷⁷ <http://www4.unfccc.int/Submissions/Lists/OSPCallForSubmission/AllItems.aspx>.

adaptation good practices, for consideration by the COP; considering information communicated by Parties on their monitoring and review of adaptation actions, support provided and received. The private sector and civil society may participate at its sessions as observers and are invited to make suggestions during the discussions on specific agenda items and to submit their written positions on various issues.¹⁷⁸

One of its proposed activities for 2017 and 2018 is to “identify the authoritative actors from the private sector, including a mapping of their influence, and identify next steps, building on the Private Sector Initiative under the Nairobi Work Programme” and “convene a meeting, to foster greater contribution of the private sector to the process to formulate and implement National Adaptation Plans (NAPs), including examples of private sector involvement to date in NAPs”.¹⁷⁹

In September 2016, the Secretariat prepared, in consultation with the AC, a technical paper on “**Opportunities and options for enhancing adaptation actions and supporting their implementation: reducing vulnerability and mainstreaming adaptation**”.¹⁸⁰ One of the key messages of this technical paper is that “while the private sector is increasingly engaged in adaptation efforts, stronger linkages between the private and public sectors could further support the acceleration of adaptation action; further work is also needed to improve the understanding of the private sector’s full potential in addressing adaptation.”¹⁸¹ The document highlights the importance of multi-level governance for adaptation, including the regional, national, subnational and local levels and the involvement of **indigenous communities**.¹⁸² Indeed, local communities should be engaged through a participatory process right at the beginning of the adaptation efforts and throughout the planning and adaptation phase. The needs and knowledge of local communities also need to be well captured as they are at the front line of climate change impacts.¹⁸³ The document also underlines that support for innovation/research and development in resilient techniques and technologies is considered to incentivise adaptation.¹⁸⁴

An expert meeting on promoting livelihoods and economic diversification to build resilience in the context of planning, prioritising and implementing adaptation took place in September 2015 in Bonn, Germany. Participants highlighted that using innovation and traditional knowledge hand-in-hand to reach sustainable growth and prioritising the needs of vulnerable communities, involving them in finding solutions for their benefit and enhancing their capabilities, knowledge and skills is important for livelihoods diversification planning and action.¹⁸⁵

The LDC Expert Group (LEG) was established by the COP in 2001. It provides technical support and advice to the LDCs on the national adaptation programmes of action (NAPAs) and the LDC work programme, and technical guidance and support to the national adaptation plan (NAP) process. The LEG meets twice a year and supports LDCs through training workshops, development of guides (such as Technical guidelines for the NAP process), tools, technical papers, publications and databases, and by reviewing draft NAPAs upon request.

¹⁷⁸ 2015 Report of the Adaptation Committee, FCCC/SB/2015/2, paras. 23-24:

<http://unfccc.int/resource/docs/2015/sb/eng/02.pdf>.

¹⁷⁹ Annex to 2016 Report of the Adaptation Committee: Revised flexible workplan of the Adaptation Committee for 2016–2018, FCCC/SB/2016/2, p. 24: <http://unfccc.int/resource/docs/2016/sb/eng/02.pdf>.

¹⁸⁰ FCCC/TP/2016/6: <http://unfccc.int/resource/docs/2016/tp/06.pdf>.

¹⁸¹ *Ibid*, para. 3.

¹⁸² *Ibid*, paras. 81-82.

¹⁸³ *Ibid*, para. 49.

¹⁸⁴ *Ibid*, para. 60.

¹⁸⁵ Report on the expert meeting on promoting livelihoods and economic diversification to build resilience in the context of planning, prioritising and implementing adaptation, AC/2016/17, para. 26.d-e: http://unfccc.int/files/adaptation/groups_committees/adaptation_committee/application/pdf/ac10_5c_report_led.pdf.

In its adaptation guides, the LEG asserts that traditional and **indigenous knowledge should be incorporated into the process of formulating and implementing NAPs**¹⁸⁶ and that it is essential to involve local communities and NGOs in this process. According to the LEG, community based participatory climate change adaptation planning will result in more and more ownership of the most vulnerable sections of the society.¹⁸⁷

6.1.4. Adaptation programmes

a. Nairobi Work Programme (NWP)

The NWP was established at COP11 in 2005 as a platform for collection, exchange and dissemination of adaptation knowledge involving various stakeholders. It is supervised by SBSTA. Its objective is to improve Parties' understanding and assessment of impacts, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures to respond to climate change on a sound, scientific, technical and socio-economic basis, taking into account current and future climate change and variability. IIED is involved in the NWP as a partner organisation.

One part of its mandate is focuses on the exploration of the **role of indigenous and traditional knowledge in adaptation**. It identified participatory rural appraisal, multi-stakeholder dialogues and knowledge exchange platforms as ideal methods for involving indigenous and local communities in the adaptation policy process. It encourages national and local governments involved in the adaptation planning to recognise that ITK has a major role to play beyond the early stages of the adaptation process; complement modern scientific knowledge, practices and tools with indigenous and TK; recognise ownership and diversity of community knowledge and practices and their evolution over time; ensure that local and indigenous communities and authorities are responsible for validating, mobilising and sharing local, indigenous and traditional knowledge and practices; facilitate community-led rather than community-based research.¹⁸⁸

At its 44th session in May 2016, the SBSTA considered NWP-related documents, including "A compilation of good practices and tools and available data collection initiatives for the use of local, indigenous and traditional knowledge and practices for adaptation", which is a joint initiative undertaken with the AC and the LEG.¹⁸⁹ The document summarises specific initiatives taken in different countries, with focus on traditional knowledge, seed management and **indigenous innovation**, including the IIED's submission concerning the RADIMA project focused on pastoralists and developed in Kenya and Tanzania in association with the United Republic of Tanzania/Kenya Climate Adaptation Finance programmes.¹⁹⁰

b. Cancun Adaptation Framework (CAF)

The CAF¹⁹¹ was adopted as part of the Cancun Agreements at the 2010 Climate Change Conference in Mexico. In the Agreements, Parties affirmed that adaptation must be addressed with the same level of priority as mitigation. Its objective is to enhance action on adaptation, including through international cooperation and coherent consideration of matters relating to adaptation under the Convention, in order to reduce vulnerability and build resilience in developing country Parties, taking into account the urgent and immediate needs of the most vulnerable developing countries. The CAF engages relevant

¹⁸⁶ Best practices and lessons learned in addressing adaptation in least developed countries, Vol. 3, 2015, p. 47, 60, 68, 70: http://unfccc.int/files/adaptation/application/pdf/leg_bpil_volume3.pdf.

¹⁸⁷ *Ibid*, p. 60, 61.

¹⁸⁸ Synopsis Series Nairobi Work Programme: Indigenous and traditional knowledge and practices for adaptation: overview, available tools, good practices and lessons learned: http://unfccc.int/files/adaptation/application/pdf/4_synopsis_itkp.pdf.

¹⁸⁹ http://unfccc.int/files/adaptation/application/pdf/compilation_litkp.pdf.

¹⁹⁰ Pp. 101-2.

¹⁹¹ <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=4>, paras. 11-35.

multilateral, international, regional and national organisations, the public and private sectors and civil society. The Adaptation Committee was established together with the CAF.

Enhanced action on adaptation should be guided by the following principles: it should follow a country-driven, gender-sensitive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems; and be based on both science and traditional and **indigenous knowledge**. All Parties should:

- plan and implement adaptation action, including in the areas of agriculture and food security;
- conduct impact, vulnerability and adaptation assessments;
- strengthen institutional capacities and enabling environments for adaptation;
- build resilience of socio-economic and ecological systems, including through sustainable management of **natural resources**;
- conduct research, development, demonstration, diffusion, deployment and transfer of technologies, practices and processes, and capacity-building for adaptation, with a view to promoting access to technologies, in particular in developing country Parties;
- strengthen data, information and **knowledge systems** (indigenous knowledge systems are not explicitly mentioned but the context of paragraphs 12 and 14 implicitly includes them).

6.2. The Kyoto Protocol¹⁹²

6.2.1. Main objectives

The KP was adopted in Japan in December 1997 as a global emission reduction regime aimed at stabilisation of GHG emissions and entered into force in February 2005. Today, it counts 192 Parties, including the EU. The USA has never ratified it and Canada withdrew in 2012 after the first commitment period.

RATIFICATION STATUS OF THE KP

Peru	Kenya	India	China
✓	✓	✓	✓

The implementation of the KP is based upon two **commitment periods**. The first one started in 2008 and ended in 2012. The second was established by the Doha Amendment in December 2012 and extends from January 2013 to the end of 2020 but is not yet in force due to insufficient ratification by Parties, including the EU (still waiting for Poland to ratify). During the first commitment period, 37 industrialised countries and the European Community committed to reduce GHG emissions to an average of 5% against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18% below 1990 levels. However, **Australia, Canada, Russia, USA** did not commit themselves to any action in this period. Despite not having ratified the Doha Amendment yet, the EU is taking action to combat climate change as set out in the Amendment.

6.2.2. Relevant provisions

The KP focuses principally on **mitigation** - it commits industrialised Parties by setting internationally binding emission reduction targets under the principle of common but differentiated responsibilities (Art.2). This means that the KP places a heavier burden with regard to GHG emissions reduction on

¹⁹² <http://unfccc.int/resource/docs/convkp/kpeng.pdf>.

developed States, as they are considered principally responsible for the high levels of GHG emissions in the atmosphere as a result of their long and intensive industrial activity.

Art.10.b obliges all Parties to the KP to formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to facilitate adequate **adaptation** to climate change, including in the agricultural sector. Art.10.c encourages States to facilitate the development and deployment of technologies that can help increase resilience to the impacts of climate change.

The **Adaptation Fund** was established in 2001 to finance adaptation projects and programmes in developing country Parties to the KP that are particularly vulnerable to the adverse effects of climate change. According to the decision adopted at the 1st session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA1), the AF “should serve” the Paris Agreement.¹⁹³ The word “should” is the result of compromise between developing countries urging for a decision already in 2016 that the AF “shall serve” the PA and developed country Parties preferring no decision in 2016 on whether the AF will serve the PA, preferring to wait until the outcome of the third review of the AF and of the work on the modalities of the AF serving the PA. Indeed, the AF is expected to become operational under the PA no earlier than at the end of 2018 when Ad Hoc Working Group on the Paris Agreement, mandated by the COP, will have completed its work on the governance and institutional arrangements, safeguards and operating modalities for the AF to serve the PA.¹⁹⁴

6.3. The Paris Agreement¹⁹⁵

6.3.1. Main objectives

The Paris Agreement (PA) was adopted at COP21 in Paris in December 2015 as an ambitious global climate treaty building on the UNFCCC. The main objectives of the PA are to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”¹⁹⁶ and to increase “the ability to adapt to the adverse impacts of climate change and foster climate resilience and low GHG emissions development, in a manner that does not threaten food production” (Art.2.1). It entered into force on 4th November 2016, since more than the minimum number of 55 ratification instruments accounting in total for over 55 % of the total GHG emissions have been deposited (Art. 21.1). The PA became legally binding on the States which ratified it on the date of its entry into force. The Agreement abandoned the distinction between Annex I, Annex II and Non-Annex Parties and instead requires *all Parties* to “undertake ambitious efforts” both in mitigation and adaptation (Art.3).

RATIFICATION STATUS OF THE PA

Peru	Kenya	India	China
✓	✓	✓	✓

¹⁹³ CMA1 decision, para. 11:

http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cma1_matters_relating_to_the_implementation_of_the_paris_agreement.pdf.

¹⁹⁴ COP23 decision, para. 14:

http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cp22_i4_eif.pdf, CMA1 decision, para. 11:

http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cma1_matters_relating_to_the_implementation_of_the_paris_agreement.pdf.

¹⁹⁵ http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

¹⁹⁶ The different language for the 2°C and 1.5°C goals, especially the wording “*pursuing efforts to limit the temperature increase to 1.5°C*” reflects the consensus reached on the temperature objective. Not all country Members wanted the 1.5°C goal to be as strong as the 2°C goal.

6.3.2. Main bodies and relevant provisions

The Conference of the Parties of the Convention shall serve as the meeting of the Parties to the Paris Agreement (CMA). Its principal task will be to review the implementation of the PA and establish necessary subsidiary bodies ([Art.16](#)). Its first session will be held at COP22 in Marrakech.

The **PA does not refer explicitly to genetic resources, farmers or agriculture**. However, some of its provisions are related to them. It also provides a balance between mitigation and adaptation action and considers that these efforts must be taken in the light of relevant human rights obligations.

Preamble: Human rights and food security

The PA should be interpreted and implemented in line with its **preamble** even if it is not binding. The preamble recognises “the fundamental priority of **safeguarding food security** and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change” and, at the same time, it notes “the importance of ensuring the integrity of all ecosystems, including the **protection of biodiversity**”. Moreover, for the first time it encourages Parties, when taking action to address climate change, to “respect, promote and consider their respective obligations on human rights, the **rights of indigenous peoples**, local communities and people in vulnerable situations.”¹⁹⁷ It also recognises that sustainable patterns of production play an important role in addressing climate change. The COP Decision 1/CP.21 recognises the need to strengthen knowledge, technologies, practices and efforts of **local communities and indigenous peoples** related to addressing and responding to climate change.¹⁹⁸

The Preamble also affirms the importance of **public participation** and public access to information. In this sense, the COP Decision 1/CP.21 reflects the agreement of Parties to the PA to uphold and promote regional and international cooperation in order to mobilise stronger and more ambitious climate action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, **local communities and indigenous peoples**.

Article 4: Mitigation

[Art.4.1](#) encourages all Parties to take **mitigation action** “on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty”. [Art. 4.2](#) obliges all Parties, both developed and developing States to prepare, communicate and maintain nationally determined contributions (NDCs). They should be updated every 5 years. The Parties should communicate their first NDC together with the submission of the instrument of ratification.¹⁹⁹ All Parties are obliged to take mitigation action – while developed States should focus on absolute economy-wide GHG emission reduction targets, developing States “should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances” ([Art.4.4](#)). Furthermore, **mitigation co-benefits resulting from Parties' adaptation actions** can contribute to mitigation outcomes under this Article ([Art.4.7](#)).

Article 7: Adaptation

[Art.7.2](#) recognises that adaptation should be aimed at protecting “people, **livelihoods** and ecosystems” and faced at all levels, including at the local level. The **global goal** for adaptation is to enhance adaptive capacity, **strengthen resilience and reduce vulnerability** to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the 2°C goal ([Art.7.1](#)). More importantly, Parties acknowledge that “adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, **traditional knowledge, knowledge of indigenous peoples and local knowledge systems**” ([Art.7.5](#)). [Art.7.9](#) obliges all Parties to engage in adaptation planning processes and the implementation of actions, which may include the “assessment of climate

¹⁹⁷ This is reiterated by the COP Decision 1/CP.21.

¹⁹⁸ Para. 135.

¹⁹⁹ COP Decision 1/CP.21, para. 22.

change impacts and vulnerability, with a view to formulating nationally determined prioritised actions, taking into account vulnerable people, places and ecosystems”, and “building the resilience of socioeconomic and ecological systems, including through **sustainable management of natural resources**”. Under Art.7.10, all Parties should submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions, in conjunction with NDCs or national adaptation plans (NAPs).

Article 8: Loss and damage

Pursuant to Art.8.4, areas of cooperation and facilitation under the “Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts” to enhance understanding, action and support may include, *inter alia*, **resilience of communities**, livelihoods and ecosystems.

Article 10: Technology development and transfer

Under Art.10.5, accelerating, encouraging and **enabling innovation** is critical for an effective, long-term global response to climate change and should be supported by the Technological Mechanism and the Financial Mechanism of the UNFCCC. However, the provision does not specify the kind of innovation.

Article 14: Global stock take

There will also be a global stocktake every 5 years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by Parties. The first stocktake will take place in 2023. In 2018, Parties will take stock of the collective efforts in relation to progress towards the long-term 2°C goal set in the Paris Agreement and to inform the preparation of NDCs.²⁰⁰

6.4. Intergovernmental Panel on Climate Change (IPCC) and IK

The **Intergovernmental Panel on Climate Change** is *not* a UNFCCC body, but it was established in 1988 by the WMO and UNEP as an international body for assessing scientific information relevant for climate change and providing options for adaptation and mitigation to policymakers. The Panel takes major decisions at Plenary Sessions of government representatives of 195 Members which take place twice a year – in spring and in autumn. The next two sessions will be held on 28-31 March 2017 in Mexico and on 6-10 September 2017. The mandate of the IPCC is limited to the examination of various scenarios and risks posed by climate change and the discussion of the impact of response measures. It is not empowered to oblige governments to take specific action. IPCC assessments are written voluntarily by scientific experts nominated by Member governments or observer organisations and divided into 3 working groups: Working Group I: the Physical Science Basis; Working Group II: Impacts, Adaptation and Vulnerability; and Working Group III: Mitigation of Climate Change. They do not conduct their own scientific research but rather assess already existing scientific, technical and socio-economic sources, mainly peer-reviewed and internationally available literature as well as reports from governments, industry and research institutions, international and other organisations, and conference proceedings.²⁰¹

In its Fifth Assessment Report (AR5), the IPCC highlights the important role of traditional knowledge in effective adaptation and the fact that some policies do not take TK related to adaptation into account.²⁰² The report states that “indigenous, local and traditional knowledge systems and practices, including indigenous peoples’ holistic view of community and environment, are a major resource for adapting to

²⁰⁰ COP Decision 1/CP.21, para. 20.

²⁰¹ Annex 2 (page 17) to Appendix A to the Principles Governing IPCC Work, the Procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of IPCC Reports: <http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a-final.pdf>.

²⁰² Porter, J.R. et al., 2014: Food security and food production systems. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B. et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 485-533, at 517, 520: http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap7_FINAL.pdf.

climate change, but these have not been used consistently in existing adaptation efforts. Integrating such forms of knowledge into practices increases the effectiveness of adaptation as do effective decision support, engagement and policy processes.”²⁰³ It also emphasises the importance of combining scientific knowledge with local and indigenous knowledge in the development of innovations for climate resilience.²⁰⁴

In its decision on the adoption of the PA,²⁰⁵ the COP invited the IPCC to provide a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways. The IPCC accepted this mandate at its 43rd session in April 2016 and is going to prepare a Special Report on this topic in the context of strengthening the global response to the threat of climate change, sustainable development and efforts to eradicate poverty.

6.5. Agriculture Issues and Indigenous Platform

At its 45th session during COP22, SBSTA discussed, *inter alia*, issues relating to agriculture, in particular the two workshops that were held at its 44th session in Bonn in May 2016:

- During the in-session workshop on the “**identification of adaptation measures**, taking into account the diversity of the agricultural systems, indigenous knowledge systems and the differences in scale as well as possible co-benefits and sharing experiences in research and development and on-the-ground activities, including socioeconomic, environmental and gender aspects”, Parties emphasised that the agriculture sector is highly affected by the adverse effects of climate change and highlighted the important role of identifying effective and context-specific adaptation measures in agriculture. Parties noted that successful adaptation in agricultural systems requires the identification of suitable adaptation measures at the regional, national and local scales, while adopting an integrated approach that combines the **indigenous knowledge** and experiences of vulnerable groups with the latest research insights of the scientific community.²⁰⁶ Participants at the workshop identified linkages with a number of processes and programmes outside the Convention, such as the CBD, the CGIAR, FAO, the IPCC.²⁰⁷ Moreover, many Parties mentioned that a key objective of the work of the SBSTA on agriculture should be the sharing and development of sound scientific and technical information to help Parties to make informed decisions on approaches and actions in agriculture that could increase food security and promote, within a sustainable development framework, synergies between agricultural productivity, adaptation and mitigation objectives.²⁰⁸
- During the in-session workshop on the “**identification and assessment of agricultural practices and technologies** to enhance productivity in a sustainable manner, food security and resilience, considering the differences in agroecological zones and farming systems, such as different grassland and cropland practices and systems”, Parties highlighted the important role of such practices and technologies and emphasised the diversity of agricultural systems and the importance

²⁰³ Climate Change 2014. Synthesis Report, p. 80: http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_All_Topics.pdf.

²⁰⁴ Denton, F. et al., 2014: Climate-resilient pathways: adaptation, mitigation, and sustainable development. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B. e al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1101-1131, at 1120: http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap20_FINAL.pdf.

²⁰⁵ COP decision 1/CP.21, para. 21.

²⁰⁶ Report by the Secretariat on the “Workshop on the identification of adaptation measures, taking into account the diversity of the agricultural systems, indigenous knowledge systems and the differences in scale as well as possible co-benefits and sharing experiences in research and development and on-the-ground activities, including socioeconomic, environmental and gender aspects” (FCCC/SBSTA/2016/INF.5 – to be considered at the 45th session of the SBSTA in Marrakech), para. 30: <http://unfccc.int/resource/docs/2016/sbsta/eng/inf05.pdf>.

²⁰⁷ *Ibid*, para. 50.

²⁰⁸ *Ibid*, para. 47.

of agriculture for economic development. A group of developing States emphasised the need to find local solutions that contribute to the global climate solution through the use of technology, knowledge transfer and capacity-building, which are all important to ensuring sustainable and resilient agricultural systems.²⁰⁹ The EU highlighted one of its projects aimed at promoting agroecology by supporting farmer innovation.²¹⁰ Furthermore, Parties noted that research and innovation are critical to implementing effective agricultural adaptation to climate change.²¹¹

Moreover, Parties agreed that a COP decision on the **issues relating to agriculture** would be the most appropriate procedural outcome from COP22, but they failed to reach consensus on substantive content. Two draft decisions were tabled – one by G77 and China and one by the EU. The 2 proposals were merged and discussed line-by-line but final agreement on the contents was never reached due to diverging views on substantial matters, namely the balance between mitigation and adaptation and access to the means of implementation. While developed countries advocated a balanced approach for mitigation and adaptation, developing country Parties were reluctant to refer to mitigation in the draft decision and preferred to focus only on adaptation and adaptation co-benefits. LDCs stressed the urgent need for “stable and predictable access” to the means of implementation (capacity building, finance and technology transfer), stating that implementation of the Paris Agreement in the agricultural sector will be nearly impossible without such means. Moreover, the developing countries insisted that reference to the principles of equity and common but differentiated responsibilities should be made in the preamble of the decision, while developed states preferred to refer to the Paris Agreement instead. However, the Parties reached consensus on the need to recognise the needs of smallholder farmers and indigenous communities when taking adaptation action. In a nutshell, the Parties made a step backwards in respect of the previous discussions. The work on the draft decision was postponed to the 46th session of SBSTA in May 2017,²¹² a COP decision is expected at COP 23.

SBSTA was mandated by COP, at its 22nd session, to take forward the proposed **Local Communities and Indigenous Peoples Platform**, referred to in decision 1/CP.21 para. 135, by convening an open multi-stakeholder dialogue at SBSTA 46 on the operationalisation of the platform. The Secretariat will prepare a report on this dialogue and forward it to SBSTA47 for consideration. SBSTA is expected to conclude its consideration at its 47th session in November 2017 under a new agenda item "local communities and indigenous peoples platform" and forward recommendations for operationalisation of the platform to COP23.²¹³ The COP decided to adopt an incremental approach to developing the platform with a view to ensuring its effective operationalisation. The COP President invited developed country Parties and other Parties and non-Party stakeholders to mobilise funds for operationalising the platform, especially in order to enable IPLCs representatives to participate in the above-mentioned dialogue.²¹⁴ Ecuador, Bolivia, Venezuela and EU intervened during the closing session of the COP expressing satisfaction and hope.

²⁰⁹ Report by the Secretariat on the “Workshop on the identification and assessment of agricultural practices and technologies to enhance productivity in a sustainable manner, food security and resilience, considering the differences in agroecological zones and farming systems, such as different grassland and cropland practices and systems” (FCCC/SBSTA/2016/INF.6 – to be considered at the 45th session of the SBSTA in Marrakech), para. 35:
<http://unfccc.int/resource/docs/2016/sbsta/eng/inf06.pdf>.

²¹⁰ *Ibid*, para. 24. The EU did not refer to SIFOR.

²¹¹ *Ibid*, para. 46.

²¹² Issues relating to agriculture. Draft conclusions proposed by the Chair (FCCC/SBSTA/2016/L.23):
<http://unfccc.int/resource/docs/2016/sbsta/eng/l23.pdf>.

²¹³ Conclusions of the COP President at the Closing Plenary, TBC.

²¹⁴ Report of the Conference of the Parties on its twenty-second session, held in Marrakech from 7 to 18 November 2016. Part one: Proceedings, FCCC/CP/2016/10, paras. 167-168:
<http://unfccc.int/resource/docs/2016/cop22/eng/10.pdf>.

6.6. Nationally Determined Contributions (NDCs) – China, India, Peru & Kenya

Pursuant to [Art.4.2](#) of the Paris Agreement, each Party shall prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. Under [Art.7.10](#), Parties should incorporate adaptation action in their NDCs. By its decision 1/CP.21, para. 22, the COP invited Parties to communicate their first NDC no later than when the Party submits its instrument of ratification, acceptance, approval or accession of the Paris Agreement, unless it has already communicated an INDC prior to joining the Agreement, or unless that Party decides otherwise. In 2018, Parties will take stock of the collective efforts in relation to progress towards the goal set in the Paris Agreement and to inform the preparation of NDCs.

China submitted its NDC²¹⁵ to the Secretariat in September 2016 together with its ratification instrument for the Paris Agreement. In its NDC drafted in the spirit of low-carbon development, China indicates that it will promote “agricultural modernisation and greenisation” and innovation in science and technology. It puts mitigation and adaptation action on equal footing. It refers neither to the 1.5-2°C objective nor to livelihoods and communities in relation to its mitigation and adaptation commitments. Its **mitigation activities in agriculture** comprise:

- Promotion of low-carbon development in agriculture, making efforts to achieve zero growth of fertiliser and pesticide utilisation by 2020;
- Control of methane emissions from rice fields and nitrous oxide emissions from farmland;
- Construction of a recyclable agriculture system, promoting comprehensive utilisation of straw, reutilisation of agricultural and forestry wastes and comprehensive utilisation of animal waste.

As far as **agricultural adaptation** is concerned, China aims at enhancing climate resilience by, *inter alia*, cultivating heat- and drought-resistant crops and tracking, monitoring and assessing the impact of climate change on biodiversity. It will support the development of “technologies on biological nitrogen fixation, green pest and disease prevention and control and protected agriculture”.²¹⁶ It will seek to strengthen the role of public supervision and participation in low-carbon development, and encourage voluntary actions of the public to combat climate change and enhance education and training by fully utilising communities and civil organisations.

China is currently implementing the National Plan on Climate Change (2014-2020)²¹⁷ and the National Strategy for Climate Adaptation.

India submitted its NDC²¹⁸ for the period 2021 to 2030 to the Secretariat in October 2016 together with its ratification instrument for the Paris Agreement. India’s NDC outlines commitments with regard to mitigation and adaptation, placing a strong emphasis on adaptation action. The document is based on the UNFCCC goal and does not refer to the temperature goal under the Paris Agreement. However, the NDC aims at propagating “sustainable way of living based on traditions and values of conservation and moderation”. The adaptation strategies reflect the needs of different communities, including the Himalayan region, and focus on agriculture and other sectors. Several programmes and strategies have been put in place to address **agricultural adaptation**:

²¹⁵ Enhanced Actions on Climate Change: China’s Intended Nationally Determined Contributions: <http://www4.unfccc.int/ndcregistry/PublishedDocuments/China%20First/China%27s%20First%20NDC%20Submission.pdf>.

²¹⁶ P. 13. It is not clear from the text of the NDC what exactly “protected agriculture” means.

²¹⁷ Accessible only in Chinese: <http://www.sdpc.gov.cn/gzdt/201411/W020141104591413713551.pdf>.

²¹⁸ India’s Intended Nationally Determined Contribution: Working towards Climate Justice, October 2016: <http://www4.unfccc.int/ndcregistry/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf>.

- *National mission on Sustainable Agriculture* enhances food security and protection of biodiversity, focusing on “new technologies and practices in cultivation, genotypes of crops that have enhanced CO₂ fixation potential, which are less water consuming and more climate resilient”;
- *National Initiative on Climate Resilient Agriculture* focuses on natural resource management and improvement of crop production, livestock and fisheries.

The NDC also aims at protecting the Himalayan Ecosystem, especially biodiversity and **traditional knowledge** and livelihoods of local communities. One of the proposed activities is to build “a body of scientific and traditional knowledge” on adaptation. Furthermore, the NDC aims at enhancing livelihoods in rural areas.

The goals specified in India’s NDC are defined in more detail in the National Action Plan on Climate Change (NAPCC) divided into 8 National Missions, including National Mission for Sustainable Agriculture and National Mission for Sustaining the Himalayan Region.²¹⁹ The ***National Mission for Sustaining the Himalayan Region*** promotes community-based management of local ecosystems. One of the measures for conservation of mountain ecosystems that have been proposed is to “encourage cultivation of **traditional varieties of crops** and horticulture by promotion of organic farming”.²²⁰ The ***National Mission for Sustainable Agriculture*** focuses on 4 areas: dryland agriculture, risk management, access to information and use of biotechnology. Some of the proposed measures to address dryland agriculture are the identification and development of new varieties of crops, in particular drought- and pest-resistant crops and alternative cropping patterns, capable of withstanding extremes of weather, long dry spells, flooding, and variable moisture availability; stakeholder consultations with farming communities; financial support for farmers to enable them to invest in and adopt relevant technologies to overcome climate related stresses.²²¹ The adaptation process will be supported by “the convergence and integration of **traditional knowledge and practice systems**, information technology,” etc.

Peru drafted its NDC²²² in September 2015 and submitted it to the Secretariat in July 2016 together with its ratification instrument for the Paris Agreement. The NDC shows balance between mitigation and adaptation efforts and goals,²²³ covering the implementation period from 1 January 2021 to 31 December 2030. The document highlights Peru’s almost insignificant contribution to global GHG emissions (produced predominantly in the Land Use, Land-Use Change and Forestry (LULUCF) sector) and its position as one of the most vulnerable countries to climate change. Peru’s mitigation undertakings under the NDC aim at achieving the 1.5-2°C temperature goal as set out in Article 2 of the Paris Agreement.

Peru set out its 2030 adaptation goal as follows: “Peru adapts to the adverse effects and takes advantage of the opportunities imposed by climate change.” One of its adaptation priorities is agriculture, with focus on people and their livelihoods, in particular on vulnerable populations including rural populations related to subsistence farming, smallholders and indigenous and native communities. The intermediate objective in this area is to “reduce the negative impact of climate change on the agrarian activity (agriculture, livestock and forestry).” Apart from agriculture, there are also several cross-cutting areas, such as “poverty and vulnerable populations approach” which aims at increasing “the number of programmes and mechanisms against poverty that incorporate adaptation to climate change”; and “**intercultural approach**” which aims at encouraging “the participation of indigenous organisations in actions on climate change”. The document further states that the implementation phase

²¹⁹ <http://www.moef.nic.in/downloads/home/Pg01-52.pdf>.

²²⁰ NAPCC, at p. 34.

²²¹ NAPCC, at p. 35.

²²² Intended Nationally Determined Contribution (iNDC) from the Republic of Peru, September 2015: <http://www4.unfccc.int/ndcregistry/PublishedDocuments/Peru%20First/iNDC%20Per%C3%BA%20english.pdf>.

²²³ Pursuant to COP decision 1/CP.20, para. 12, Parties are encouraged to include their adaptation commitments in their INDCs: <http://unfccc.int/resource/docs/2014/cop20/eng/10a01.pdf#page=2>.

of the NDC will “maintain the intercultural and intergenerational foundation considered in the formulation phase.”

Kenya submitted its NDC²²⁴ in July 2015 before the adoption of the Paris Agreement. The document highlights its small contribution to global GHG emissions and its vulnerable status with regard to climate change. The NDC outlines both mitigation and adaptation action. The mitigation actions should follow the 2°C temperature objective, with timeframe for implementation up to 2030. The principal mitigation activities cover, *inter alia*, climate smart agriculture. Due to its high vulnerability to the impacts of climate change, Kenya puts significant priority on medium term adaptation actions which are encompassed in its NAP and the National Climate Change Action Plan (NCCAP) for 2013-2017. It highlights that numerous adaptation activities have “strong synergies with mitigation actions”. Some of the NDC’s **priority adaptation actions** are:

- supporting innovations that promote climate resilient development;
- enhancing public participation and access to information on climate change adaptation;
- enhancing the resilience of ecosystems to climate variability and change;
- strengthening the adaptive capacity of the most vulnerable groups and communities;
- enhancing the resilience of agriculture, livestock and fisheries value chains by promoting climate smart agriculture and livestock development.

The NCCAP²²⁵ provides more detail on adaptation actions in agriculture. These efforts should be carried out in line with the concept of **climate smart agriculture**. The following agriculture adaptation actions should be up-scaled: “promotion and bulking of drought tolerant traditional high value crops; water harvesting for crop production; [...] conservation agriculture; agro-forestry; and integrated soil fertility management”.²²⁶ Inventory of **indigenous knowledge** is considered crucial for livestock adaptation actions. Climate change resilient inputs, technologies and strategies should be developed through research. Adaptation success stories should be identified, and up-scaling should be supported in relevant agro-climatic zones. The NCCAP calls for the development of indigenous technology for resilience and collection of indigenous knowledge relevant for adaptation.

6.7. National Adaptation Plans (NAPs)

While NAPAs were designed to address *urgent and immediate* needs of LDCs, the NAP process was established at COP17 under the Cancun Adaptation Framework²²⁷ in order to enable both developed and developing Parties, especially LDCs, to formulate and implement NAPs as a means of identifying *medium- and long-term adaptation needs* and developing and implementing strategies to address those needs. The NAP process is based on a country-driven, gender-sensitive, participatory and transparent approach. Its objectives are to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience; and to facilitate the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate.²²⁸ The NAP process is not prescriptive, and it is guided by the same principles as the CAF. The LEG provides technical guidance and support to the NAP process and has developed Technical

²²⁴ Kenya’s Intended Nationally Determined Contribution (INDC), July 2015:

http://www4.unfccc.int/Submissions/INDC/Published%20Documents/Kenya/1/Kenya_INDC_20150723.pdf.

²²⁵ National Climate Change Action Plan 2013 – 2017 of the Republic of Kenya, 2013, at pp. 58-60, 106: <http://cdkn.org/wp-content/uploads/2013/03/Kenya-National-Climate-Change-Action-Plan.pdf>.

²²⁶ P. 60. It is not clear from the text of Kenya’s NCCAP whether “traditional high value crops” refers to traditional varieties. If read in the context of climate smart agriculture, it might not concern traditional varieties.

²²⁷ <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=5>, para. 15.

²²⁸ COP decision 5/CP.17, para. 1: <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf>.

Guidelines.²²⁹ NAPs are developed by national governments in collaboration with local communities, the private sector, NGOs. NAPs should identify priority adaptation programmes and provide mechanisms by which policies can gradually be modified, to become more resilient.

Kenya has already drafted its NAP, but it has yet to be endorsed by its government.²³⁰ Private sector, CSOs, government and other stakeholders were included in the consultation phase of the NAP process. The NAP contains various actions in the area of agriculture:

- Crop agriculture: Enhancing the resilience of the agricultural value chain
 - Short term goal (1-2 years): promotion of indigenous knowledge on crops;
 - Medium term goal (3-5 years): promotion and bulking of drought tolerant traditional high value crops;
 - Long term goal (>6 years): promote and implement climate smart agriculture practices in Kenya.²³¹

Peru started drafting its NAP at the end of 2015. It will represent a mechanism for achieving the adaptation goals set out in Peru's NDC.²³²

²²⁹ http://unfccc.int/files/adaptation/cancun_adaptation_framework/application/pdf/naptechguidelines_en_g_high_res.pdf.

²³⁰ Information paper "Progress in the process to formulate and implement national adaptation plans", FCCC/SBI/2016/INF.11, at para. 33: <http://unfccc.int/resource/docs/2016/sbi/eng/inf11.pdf>.

²³¹ Ministry of Environment and Natural Resources of Kenya, *Kenya's National Adaptation Plan (Overview)*, Integrating NAPs into Agricultural Sectors Inception Workshop 08 June 2016, Nairobi: http://adaptation-undp.org/sites/default/files/resources/stephen_nap_overview.pdf.

²³² Intended Nationally Determined Contribution (iNDC) from the Republic of Peru, September 2015, at p. 8.

Policy	Provisions on TK & BCH	Weaknesses	Gaps	Recommendations
Paris Agreement	<ul style="list-style-type: none"> Recognises the fundamental priority of food security and vulnerabilities of food production systems Encourages Parties to consider their human rights obligations when taking climate action, namely rights of indigenous peoples, local communities and people in vulnerable situations Art.7.1: global goal on adaptation Art.7.5: country-driven, participatory and fully transparent approach to adaptation, taking into account vulnerable groups, communities and ecosystems and based on science and TK, IK and local knowledge systems Decision 1/CP.21, para. 136 recognises the need to strengthen knowledge, technologies, practices and efforts of local communities and indigenous peoples related to addressing and responding to climate change, and establishes a platform for the exchange of experiences and 	<ul style="list-style-type: none"> Soft language adopted for the human rights obligations (should instead of shall; positioned in the preamble instead of the operative part of the Agreement) Soft language adopted in para. 11 of the CMA1 decision for the Adaptation Fund (AF “should serve” instead of “shall serve” the PA)²³³ 	<ul style="list-style-type: none"> No explicit mention of agriculture, GRs or farmers. 	<ul style="list-style-type: none"> Need for CMA decisions on adaptation and mitigation in agriculture. Need for a CMA decision clearly outlining the governance and institutional arrangements, safeguards and operating modalities for the AF to serve the PA – expected in 2018.²³⁴

²³³ CMA1 decision, para. 11:

http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cma1_matters_relating_to_the_implementation_of_the_paris_agreement.pdf.

²³⁴ COP23 decision, para. 14: http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cp22_i4_eif.pdf, CMA1 decision, para. 11:

http://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cma1_matters_relating_to_the_implementation_of_the_paris_agreement.pdf.

sharing of best practices on mitigation and adaptation

UNFCCC	<ul style="list-style-type: none"> • Work under SBSTA item 7 on issues relating to agriculture taking into account the needs of smallholders and IPs • New agenda item under SBSTA - Local Communities and Indigenous Platform • Consideration of IPs involvement under AC and LEG • NWP explored the role of TK in adaptation 	<ul style="list-style-type: none"> • Little progress on issues relating to agriculture due to lack of consensus between developing and developed country Parties 	<ul style="list-style-type: none"> • No explicit mention of agriculture, GRs or farmers. 	<ul style="list-style-type: none"> • Need for a COP decision on issues relating to agriculture encouraging the States to take into consideration the needs of smallholder farmers and indigenous communities when taking adaptation action. Since no consensus was reached at COP22 due to diverging views of developing and developed country Parties on the balance between mitigation and adaptation, the work on this issue will continue at SBSTA46 with an outlook for COP23 decision. • Need to operationalise the Local Communities and Indigenous Platform – expected at COP23 in November 2017.
Kyoto Protocol	<ul style="list-style-type: none"> • AF created under KP will serve the PA 	<ul style="list-style-type: none"> • Focus especially on mitigation 	<ul style="list-style-type: none"> • No explicit mention of IPs, farmers, GRs, agriculture • Very little attention to adaptation 	<ul style="list-style-type: none"> • KP is expected to end with the end of the second commitment period

7. Policies on Indigenous Peoples' Rights

This section outlines relevant provisions on the rights of indigenous peoples within the UN Declaration on the Rights of Indigenous Peoples, UN Permanent Forum on Indigenous Issues and the Indigenous and Tribal Peoples ILO Convention 169. While Peru ratified the ILO Convention 169 and voted in favour of the Declaration, India and China only voted in favour of the Declaration and Kenya has not ratified the Convention and abstained in voting on the Declaration.

7.1. UN Declaration on The Rights of Indigenous Peoples (UNDRIP)²³⁵

The Declaration was adopted by the UN General Assembly in September 2007, with 143 States voting in favour, 4 States against (Australia, Canada, US, NZ) and 11 abstentions (incl. Russia and Kenya). However, all objectors changed their positions and Canada removed its objector status in May 2016. Consequently, 147 States support the Declaration now. It is not a legally binding instrument, but it reflects both global and indigenous consensus on IPs' rights, as the Declaration was developed in collaboration with ILCs.²³⁶ Indeed, since it was adopted by the UN General Assembly, it should be taken into account by all UN Member States in good faith. The Declaration also calls for the implementation of binding international human rights treaties concerning IPs.²³⁷ Moreover, certain provisions of the Declaration have already become customary law.

The Declaration provides a global legal framework of minimum standards for the survival, dignity, well-being and rights of the world's IPs,²³⁸ distinguishing between individual and collective rights. It emphasises the rights of indigenous peoples to maintain and strengthen their own institutions, cultures and traditions, and to pursue their development in keeping with their own needs and aspirations. It prohibits discrimination against IPs and promotes their full and effective participation in all matters that concern them and their right to remain distinct and to pursue their own visions of economic and social development.²³⁹

ADOPTION STATUS OF THE UNDRIP

Peru	Kenya	India	China
✓	Abstained	✓	✓

7.1.1. Next relevant meetings

- 10th session of the Expert Mechanism on the Rights of Indigenous Peoples (a subsidiary body of the Human Rights Council), July 2017
- 16th Session of UNPFII - 24 Apr-5 May 2017, New York
 - Special theme: measures taken to implement the UNDRIP
 - The session will also address the follow-up to the outcome document of the 2014 World Conference on Indigenous Peoples, in particular (i) implementation of national action plans, strategies or other measures; (ii) ways to enhance the participation of indigenous peoples in the United Nations; (iii) implementation of the UN system-wide action plan on indigenous peoples.

²³⁵ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N06/512/07/PDF/N0651207.pdf?OpenElement>.

²³⁶ OHCHR, *Indigenous Peoples and the United Nations Human Rights System. Fact Sheet No. 9/Rev.2*, p. 8: <http://www.ohchr.org/Documents/Publications/fs9Rev.2.pdf>.

²³⁷ UNDRIP, Art. 1.

²³⁸ *Ibid*, Art. 43.

²³⁹ *Ibid*, Arts. 2, 3, 5.

7.1.2. Relevant provisions of the UNDRIP

The UN General Assembly recognises and reaffirms in the **Preamble** of the Declaration that “IPs possess **collective rights** which are indispensable for their existence, well-being and integral development as peoples.”

Article 8: Prohibition of destruction of IPs’ culture

Art.8.2 obliges States to provide effective mechanisms for prevention of, and redress for “any action which has the aim or effect of dispossessing them of their lands, territories or resources”. This provision implies IPs’ possession of GRs.

Article 11: Right to practice cultural traditions and customs

Art.11 establishes the right of IPs to practice and revitalise their cultural traditions and customs. It also obliges States to provide redress through effective mechanisms with respect to their cultural and **intellectual property** taken without their FPIC or in violation of their laws, traditions and customs. This provision may have an impact on biocultural innovations, as it provides a basis for their protection.

Article 18: Participation

Art. 18 establishes the right of IPs to participate in decision-making in matters which would affect their rights.

Article 19: FPIC

Art. 19 obliges States to consult in good faith with the IPs concerned in order to obtain their **FPIC**²⁴⁰ before adopting and implementing legislative or administrative measures that may affect them. States must also have consent from IPs before undertaking projects that affect indigenous peoples’ rights to land, territory and resources, including mining and other utilisation or exploitation of resources (Art.32). Articles 18, 19 and 32 should be considered for example in relation to the formulation of climate change adaptation policies, agricultural policies, IPR policies, etc.

Article 20: Subsistence and development

Art. 20 recognises the right of IPs to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities.

Article 24: Right to medicinal plants

Art. 24 explicitly recognises that “indigenous peoples have the right to their traditional medicines [...], including the conservation of their vital **medicinal plants**”.

Article 26: Right to resources

Art.26 *implicitly* recognises the **ownership of genetic resources** by IPs by establishing the right of IPs “to the resources which they have traditionally owned otherwise used or acquired” and the right of IPs “to own, use, develop and control the [...] resources that they possess by reason of traditional ownership or other traditional [...] use, as well as those which they have otherwise acquired.” In this respect, it also obliges States to give legal recognition and protection to such resources. This obligation is reflected in Art. 27 which encourages the participation of IPs in the process of implementation of IPs’ rights. (See also Art. 31 below.)

²⁴⁰ **Free** = no coercion, intimidation or manipulation. **Prior** = consent should be sought well in advance of any authorisation or commencement of activities, respecting time requirements of indigenous consultation/consensus processes. **Informed** = disclosure of all relevant information on the proposed project or activity, including a preliminary assessment of the likely economic, social, cultural and environmental impact and potential risks.

Article 28: Redress for confiscation of resources

Art. 28 recognises the right of IPs to restitution or just, fair and equitable compensation for their traditionally owned resources if they have been confiscated, taken used or damaged without their FPIC.

Article 31: Protection of TK

Art.31 explicitly recognises the collective right of IPs to “**maintain, control, protect and develop their cultural heritage, TK** and traditional cultural expressions, [...] including **GRs, seeds, medicines**, knowledge of the properties of fauna and flora”. They also have the right to “maintain, control, protect and develop their **intellectual property** over such cultural heritage, TK, and traditional cultural expressions”.

The Expert Mechanism on the Rights of IPs expressed its concern about the fact that intellectual property systems are often focused on protecting the intellectual property of individuals rather than collectives, which contradicts IPs’ customary laws and policies related to their TK.²⁴¹

Art. 31.2 obliges States to “take effective measures to recognise and protect the exercise of these rights”. The obligation to recognise goes beyond the passive obligation to respect (i.e. State entities should refrain from interfering with the enjoyment of the right) – it means that States should ensure legal recognition. The obligation to protect includes protection from illegal or unjust exploitation of their TK by private or transnational enterprises and corporations.

Although the Declaration does not refer to “innovation”, it has been later established by the UNPFII that the concept of TK includes also traditional innovation, as outlined below in Section 2.4.1.1 on the work of UNFPPII.

7.1.3. World Conference on Indigenous Peoples

In its resolution 65/198, the UN General Assembly decided to organise a high-level plenary meeting of the UN General Assembly, known as the World Conference on Indigenous Peoples, held in 2014. The purpose of this meeting was to share perspectives and best practices on the realisation of the rights of IPs, including to pursue the objectives of the UNDRIP.²⁴² In the outcome of the Conference, participating States (including, Peru, India and China)²⁴³ recognised the important contribution of TK, innovations and practices of IPLCs to the conservation and sustainable use of biodiversity and the importance of participation of IPs in benefits of their knowledge, innovations and practices;²⁴⁴ committed to developing programmes, in consultation with IPs, on transmission of TK;²⁴⁵ endorsed the necessity for PIC from IPs before the approval of any project affecting their resources;²⁴⁶ and recognised the importance of the role of IPs in environmental development through traditional sustainable agricultural practices, including traditional seed supply systems.²⁴⁷

²⁴¹ Expert Mechanism on the Rights of Indigenous Peoples, *Study on the role of languages and culture in the promotion and protection of the rights and identity of indigenous peoples* (A/HRC/EMRIP/2012/3), para 62: http://www.ohchr.org/Documents/Issues/IPeoples/EMRIP/Session5/A-HRC-EMRIP-2012-3_en.pdf.

²⁴² Resolution adopted by the General Assembly on 21 December 2010 No. 65/198. Indigenous issues (A/RES/65/198), para. 8: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/65/198.

²⁴³ I was unable to find any proof of Kenya’s participation.

²⁴⁴ Resolution adopted by the General Assembly on 22 September 2014 No. 69/2. Outcome document of the high-level plenary meeting of the General Assembly known as the World Conference on Indigenous Peoples (A/RES/69/2), para. 22: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/69/L.1.

²⁴⁵ *Ibid*, para. 15.

²⁴⁶ *Ibid*, para. 20.

²⁴⁷ *Ibid*, para. 26.

7.1.4. The Bodies promoting the implementation of the UNDRIP

The Declaration does not establish any new bodies but in Article 42, the General Assembly obliges the UN, its bodies, including the Permanent Forum on Indigenous Issues, and specialised agencies, including at the country level, to promote respect for and full application of the provisions of UNDRIPs and monitor its effectiveness. Moreover, in Article 41, the General Assembly invites the organs and specialised agencies of the UN system and other intergovernmental organisations to contribute to the full realisation of the provisions of UNDRIPs through the mobilisation of financial cooperation and technical assistance.

7.1.5. The United Nations Permanent Forum on Indigenous Issues (UNPFII)²⁴⁸

The UNPFII was established in 2000 as a high-level advisory body to the Economic and Social Council (ECOSOC) to deal with indigenous issues related to economic and social development, culture, environment, education, health and human rights. According to its mandate, the Permanent Forum:

- provides expert advice and recommendations on indigenous issues to the Council, as well as to UN programmes, funds and agencies, through the Council;
- raises awareness and promotes the integration and coordination of activities related to indigenous issues within the UN system;
- prepares and disseminates information on indigenous issues.

Moreover, under Art. 42 of UNDRIPs; the Permanent Forum shall promote respect for and full application of the provisions of UNDRIPs and follow up its effectiveness. The Permanent Forum meets annually; non-State stakeholders registered with ECOSOC are admitted to UNPFII meetings. It comprises 16 independent experts who serve for a term of 3 years - 8 are nominated by governments and 8 by indigenous organisations according to the regional criterion.

UNPFII's work on TK, climate change and SDGs

At its 14th session in 2015, the UNPFII reviewed the implementation process of its recommendations. The Permanent Forum also endorsed the **“Study on the treatment of traditional knowledge in the framework of the United Nations Declaration on the Rights of Indigenous Peoples and the post-2015 development agenda”**²⁴⁹ conducted by its member María Eugenia Choque Quispe from Bolivia. The Study focuses on TK in CBD and WIPO as well as local, national, international and urban contexts, with particular focus on climate change.

With regard to the post-2015 development agenda, the UNPFII recommended that this agenda should build on the “fundamental right” of IPs to FPIC and full participation in the development process, as well as on the recognition of the importance of TK for agricultural production and biodiversity, especially in the face of climate change.²⁵⁰ However, neither SDG 15 on halting biodiversity loss nor SDG 13 on climate change make any reference to IPs or TK. A mention of IPs can be found only in Goal 2 on ending hunger. Goal 2.2 aims to double the agricultural productivity and incomes of small-scale food producers, in particular IPs and family farmers, among others, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment. Moreover, Goal 2.5 endorses existing international treaties related to access to GRs and TK: it aims to “maintain the genetic diversity of seeds, cultivated plants [...], including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilisation of GRs and associated TK, as internationally agreed.”

²⁴⁸ <https://www.un.org/development/desa/indigenouspeoples/unpfii-sessions-2.html>.

²⁴⁹ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/028/00/PDF/N1502800.pdf?OpenElement>.

²⁵⁰ Paras. 5, 10, 11, 15.

Furthermore, the Study reaffirms the international consensus on the fact that **TK is a system of innovations and practices of IPs**, even within the WIPO framework.²⁵¹ According to the UNPFII, the only way to preserve TK is to protect indigenous lands and ensure that the biodiversity resources on these lands survive.²⁵² At the end of the Study, the Permanent Forum makes recommendations for States²⁵³ to incorporate TK into different development plans on eradicating poverty; to develop training plans against abuse of indigenous biodiversity associated with TK; and to develop biocultural indicators on the topics of land, territory, FPIC and consultation, the status of TK, access to GRs. It also makes recommendations for the UN system agencies:²⁵⁴

- The CBD Secretariat should continue to support and strengthen efforts to salvage, preserve and apply traditional knowledge; repatriate traditional knowledge; develop biocultural protocols.
- The WIPO secretariat should seek the full and effective participation of indigenous peoples in the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore.
- UN system and national donors should support the process of recovering TK in coordination with IPs in order to face climate change.

Despite the fact that the theme of the 15th session in 2016 was “Indigenous peoples: Conflict, Peace and Resolution”, the UNFII addressed the issue of preservation and revitalisation of **indigenous languages** which are inherent to the preservation of TK. The Expert Group on the preservation and revitalisation of indigenous languages recommended that IPs should develop awareness-raising campaigns aimed at policymakers highlighting that indigenous languages are repositories of TK that is important for sustaining biodiversity.²⁵⁵ It recommended that States recognise linguistic rights of IPs and to develop policies to protect indigenous languages.²⁵⁶ The Permanent Forum recommended to its Member States²⁵⁷ to develop legislative measures, with the full and effective participation of IPs, to protect traditional medicine and knowledge, and to secure the rights of indigenous peoples to intellectual property, in order to contrast the threat of biopiracy.²⁵⁸

7.1.6. Special Rapporteur on the rights of indigenous peoples²⁵⁹

Appointed for the first time in 2001 by the UN Commission on Human Rights (now known as the Human Rights Council), the Special Rapporteur on the Rights of IPs is an independent expert working under the UN Human Right Council. As of 2014, Victoria Tauli Corpuz from Philippines holds this office. The mandate of the SR is to:

- promote good practices, including new laws, government programs, and agreements between indigenous peoples and states, to implement international standards concerning the rights of indigenous peoples;
- report on the overall human rights situations of indigenous peoples in selected countries;

²⁵¹ Paras. 24, 25.

²⁵² Para. 31.

²⁵³ Pp. 13, 14.

²⁵⁴ Pp. 14, 15.

²⁵⁵ Expert group meeting on the theme “Indigenous languages: preservation and revitalisation (articles 13, 14 and 16 of the United Nations Declaration on the Rights of Indigenous Peoples)” (E/C.19/2016/10), para. 42.b: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/055/48/PDF/N1605548.pdf?OpenElement>.

²⁵⁶ *Ibid*, para. 60.

²⁵⁷ I.e. UNDRIP adopters.

²⁵⁸ Recommendations to Member States. 15th Session of the UN Permanent Forum on Indigenous Issues, p. 4: <http://www.un.org/esa/socdev/unpfii/documents/2016/Docs-updates/Recs-for-States-English.pdf>.

²⁵⁹ <http://www.ohchr.org/EN/Issues/IPeoples/SRIIndigenousPeoples/Pages/SRIPeoplesIndex.aspx>.

- address specific cases of alleged violations of the rights of indigenous peoples through communications with Governments and others.

Moreover, the current SR decided to dedicate a part of her mandate to measures to protect and promote indigenous cultural heritage and TK, including developments in relevant conventions and standard-setting processes.²⁶⁰

7.1.7. Special Rapporteur on the right to food²⁶¹

As of 2014, Hilal Elver from Turkey holds this office. Her mandate is to promote the full realisation of the right to food and the adoption of measures at the national, regional and international levels for the realisation of the right of everyone to adequate food and the fundamental right of everyone to be free from hunger.

In 2009, the previous SR Olivier De Schutter prepared a report on “**Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation**”.²⁶² In the report, he noted that in the process of professionalisation of breeding and the emergence of temporary monopoly created by IPRs, small farmers may become increasingly dependent on expensive inputs, creating the risk of indebtedness in the face of unstable incomes. He recognised that most farmers in developing countries still rely on traditional seed systems, which, for them, are a source of economic independence and resilience in the face of threats such as pests, diseases or climate change.²⁶³ He recommended that governments ensure that the development of the IPR regime and the implementation of seed policies at the national level are compatible with and conducive to the realisation of the right to adequate food by:

- promoting the implementation of farmers’ rights;
- encouraging the development, diffusion and commercialisation of farmers’ varieties (including efficient traditional seed varieties in government approved seed lists, as well as in subsidised seed distribution programmes);
- supporting participatory plant breeding and farmer field schools;
- developing incentives for the wider use of food products from farmers’ varieties;
- creating a mechanism to promote farmers’ participation at all levels of decision-making, especially in the design of legislation covering the certification and trade of seeds or the protection of plant varieties.

He also recommended that international agencies and donors put farmers at the centre of research through participatory research schemes such as participatory plant breeding.²⁶⁴ De Schutter also points out that IP protection systems (especially patents) lead to homogeneity and standardisation, which might impede innovation by farmers and deteriorate agrobiodiversity.²⁶⁵ He recommended that States support innovation in the commercial as well as farmers’ seed system for the benefit of smallholder farmers.²⁶⁶ Moreover, with regard to TK, he suggested that States could provide for documentation and catalogisation of GRs and related TK in gene banks and reward farmers for their contribution.²⁶⁷

The current SR considers climate change an urgent global policy challenge and a threat to the right to food due to its adverse impacts on agricultural production. In the report on the “**Impact of climate change on the right to food**”,²⁶⁸ the SR identified IPs, including those living in mountainous areas, and

²⁶⁰ Report of the Special Rapporteur on the rights of indigenous peoples, Victoria Tauli Corpuz (A/HRC/27/52), p. 16: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/117/35/PDF/G1411735.pdf?OpenElement>.

²⁶¹ <http://www.ohchr.org/EN/Issues/Food/Pages/FoodIndex.aspx>.

²⁶² <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N09/424/73/PDF/N0942473.pdf?OpenElement>.

²⁶³ P. 2.

²⁶⁴ Pp. 20, 21.

²⁶⁵ P. 14.

²⁶⁶ P. 19.

²⁶⁷ P. 18.

²⁶⁸ <http://www.ohchr.org/Documents/Issues/Food/A-70-287.pdf>.

smallholder farmers as particularly vulnerable to the effects of climate change on their food security.²⁶⁹ She questioned the concept the climate-smart agriculture and underlined the important role of **agroecology** combining local knowledge and innovative technology in adapting to climate change and, at the same time, benefitting smallholders and IPs.²⁷⁰ She pointed out that increased food production does not necessarily alleviate hunger: “The world has long produced enough food, sufficient not only to meet the caloric requirements of the existing global population of over 7 billion, but also to meet the needs of a population expected to reach 9 billion in 2050.”²⁷¹ Given that increased agricultural activity contributed and is still contributing to climate change and degradation of natural resources, she stressed the need to shift from current industrial agriculture to agroecology which is more respectful of both the environment and people.²⁷² The SR invited Governments to “greatly increase financial allocations to agroecology” in order to demonstrate that it can “feed the world without destroying the environment and at the same time reduce the adverse impact of climate change.”²⁷³ She recommends that “the pivotal roles in food production of smallholder farmers [...] and indigenous and local communities be recognised and protected and their acute vulnerability to climate change acknowledged”.²⁷⁴

7.1.8. The Expert Mechanism on the Rights of Indigenous Peoples (EMRIP)

Established in 2007 under Resolution 6/36,²⁷⁵ The EMRIP is a subsidiary body of the Human Rights Council. Its principal task is to provide the Council with thematic expertise on the rights of IPs. It consists of five independent experts on the rights of indigenous peoples and meets annually, its meetings are open to non-state actors. In the 2011 “**Study on the right to participate in decision making**”, the EMRIP advised on the interpretation of the concept of PIC. It recommended considering indigenous peoples’ perspectives and priorities in the definition of matters that can affect them and require their PIC. According to the EMRIP, indigenous peoples’ right to FPIC entitles them to control the outcome of such processes²⁷⁶ and recommended to States to promote the participation of IPs at all levels of decision making, not only in local or national processes but also in external ones where IP consider that certain issues can affect them.

In 2012, the EMRIP issued the “**Study on the role of languages and culture in the promotion and protection of the rights and identity of IPs**”,²⁷⁷ which briefly addressed also the issue of TK and modern IPR systems mentioned above in the comment on Art.31 of UNDRIPs. The EMRIP advised governments to guarantee that indigenous peoples’ TK is not utilised without their FPIC; to promote and respect indigenous peoples’ institutions and customary arbitration processes to redress the negative impact of their laws on indigenous peoples, including through the return of indigenous lands and traditional resources.²⁷⁸

In 2015, the EMRIP issued the “**Study on the Promotion and Protection of the Rights of Indigenous Peoples with Respect to their Cultural Heritage**”.²⁷⁹ The study states that TK consists of knowledge, know-how, skills, **innovations** and practices and that intellectual property protection “could make it possible to protect traditional remedies and indigenous crafts [...] against misappropriation and enable communities to control and benefit collectively from their commercial exploitation”. The study

²⁶⁹ Paras. 32, 40.

²⁷⁰ Para. 76.

²⁷¹ Para. 83.

²⁷² Para 87.

²⁷³ Para. 89(l).

²⁷⁴ Para. 89(i).

²⁷⁵ Human Rights Council, Resolution 6/36. Expert mechanism on the rights of indigenous peoples, para. 1: http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_6_36.pdf.

²⁷⁶ Expert Mechanism Advice No. 2 (2011): Indigenous peoples and the right to participate in decision-making, p. 20:

<http://www.ohchr.org/EN/Issues/IPeoples/EMRIP/Pages/ExpertMechanismAdvice.aspx>.

²⁷⁷ http://www.ohchr.org/Documents/Issues/IPeoples/EMRIP/Session5/A-HRC-EMRIP-2012-3_en.pdf.

²⁷⁸ Expert Mechanism Advice No. 3 (2012): Indigenous peoples’ languages and cultures, pp. 26, 27:

<http://www.ohchr.org/EN/Issues/IPeoples/EMRIP/Pages/ExpertMechanismAdvice.aspx>.

²⁷⁹ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/185/41/PDF/G1518541.pdf?OpenElement>.

highlights the concerns of IPs about the fact that existing international mechanisms for intellectual property protection inadequately protect **traditional forms of innovation**, as these mechanisms protect mainly the intellectual property of individuals, rather than communities, and consider intellectual property as alienable, which is inconsistent with indigenous peoples' customary laws. The IPs also argue that the "public domain" status of TK exposes it to misappropriation and misuse.²⁸⁰ In its Advice no. 8 (2015) annexed to the aforementioned study on cultural heritage, the Expert Mechanism encourages WIPO and its Intergovernmental Committee to ensure the full participation of IPs in negotiations and to seek and obtain their FPIC before any new international instruments for the protection of TK is adopted. The EMRIP also stresses that the "process in which laws governing the use of TK and GRs are developed needs to conform with the rights guaranteed under the [UNDRIP], particularly Article 31."²⁸¹

7.1.9. ILO Convention 169 on Indigenous and Tribal Peoples 282

a. Main objectives

The ILO Convention 169 is the only international treaty which deals exclusively with the rights of IPs. It was adopted by the International Labour Conference in June 1989. Even if it is open to ratification by all States, it does not have a global application, since it has been ratified by just as few as 22 States so far.²⁸³ The Convention is legally binding only on these States. It focuses mainly on land, labour, education and health rights. It does not refer to TK, innovations or genetic resources. PIC is only required for relocation of IPs.

The Convention is not as enforceable as other Conventions, since the review of implementation is based on a dialogue between States and supervisory bodies. States which ratified the Convention are obliged to report on implementation at least every 5 years, preferably upon consultation with IPs.²⁸⁴ Reports are reviewed by the ILO Committee of Experts on the Application of Conventions and Recommendations, which issues comments to the concerned States in order to further guide the implementation process and reports to the ILO Conference.

RATIFICATION STATUS OF THE ILO CONVENTION

Peru	Kenya	India	China
✓	x	x	x

b. Relevant provisions

Article 1: Definition of tribal and indigenous peoples

The Convention distinguishes between tribal and indigenous peoples, applying the criterion of self-identification as tribal or indigenous. It defines **tribal peoples** as peoples living in independent countries "whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulation". **Indigenous peoples** are peoples in independent countries "who are regarded as indigenous on account of their descent from the populations which inhabited the country, or

²⁸⁰ Paras. 57, 58.

²⁸¹ Annex, para. 34.

²⁸²

http://www.eods.eu/library/ILO_Indigenous%20and%20Tribal%20Peoples%20Convention_1989_EN.pdf.

²⁸³ Argentina, Bolivia, Brazil, Central African Republic, Chile, Colombia, Costa Rica, Denmark, Dominica, Ecuador, Fiji, Guatemala, Honduras, Mexico, Nepal, Netherlands, Nicaragua, Norway, Paraguay, Peru, Spain, Venezuela.

²⁸⁴ ILO Constitution, Arts. 19, 22.

a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.”

Article 8: Customary laws

Art. 8.1 establishes that “in applying national laws and regulations to the peoples concerned, due regard shall be had to their customs or customary laws.”

Article 15: Right to natural resources

Art. 15.1 stipulates that IPs have the right “to the natural resources pertaining to their lands”, including the right of IPs to participate in the use, management and conservation of natural resources, save for situations where the State retains the ownership over mineral, sub-surface or other resources. In such case, the State is obliged to consult with IPs (Art. 6) and to ensure benefit sharing (Art. 7).

Recently, ILO issued a technical note on the role of IPs in combating climate change, where it recognised the importance of TK for climate change adaptation.²⁸⁵

²⁸⁵ ILO, Technical Note. Indigenous Peoples and Climate Change From Victims to Change Agents through Decent Work (2016), p. 4: https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2015/06/Technical-Note_Indigenous-Peoples_ILO.pdf.

Policy	Provisions on TK / BCH	Weaknesses	Gaps	Recommendations
UNDRIPs	<ul style="list-style-type: none"> • Preamble: recognition of collective rights of IPs. • Art. 8 on redress for dispossession of resources. • Art. 11 on FPIC for protection of intellectual property of IPs. • Art. 18 on participation in decision-making. • Art. 24: right to medicinal plants. • Art. 26: recognition of ownership of GRs by IPs. • Art. 31 explicitly recognises the right to maintain, control, protect and develop cultural heritage and TK and intellectual property over them. • Art. 32: PIC for projects affecting IPs' rights. 	<ul style="list-style-type: none"> • Art. 24 recognises the right of IPs to conservation of plants for medicinal purposes only, not mentioning food security or agriculture. But Art. 29 recognises the right of IPs to the conservation and protection of the environment and the productive capacity of their lands or territories and resources – this provision may therefore cover also other GRs than those for medicinal purposes. • Art.31 obliges States only to “recognise and protect” the TK. It does not refer to the obligation of States to fulfil (facilitate) the full realisation of this right. 	<ul style="list-style-type: none"> • Non-binding text. • No mention of community protocols, food security and agriculture. • No mention of TK-based innovation. 	<ul style="list-style-type: none"> • States should strive to voluntarily implement the Declaration through national policies, plans, strategies and legislation.
ILO 169	<ul style="list-style-type: none"> • Art. 8 on protection of customs and customary laws • Art. 15: right of IPs to participate in the use, management and conservation of natural resources 	<ul style="list-style-type: none"> • Very few (22) States on board. 	<ul style="list-style-type: none"> • No provision for protection of TK. • No reference to innovations, GRs and IPRs. 	<ul style="list-style-type: none"> • More States should ratify the Convention. • Arts.8 and 15 could be interpreted so as to include the protection of TK, innovation and access to traditionally held GRs.