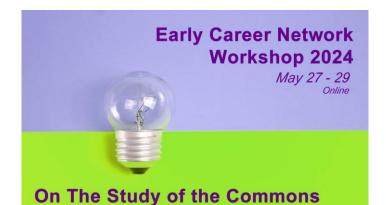
## UCLouvain



Faculté de droit et de criminologie





Traditional Knowledge, Western Science, and discrimination within the Intellectuals Property Rights on plant genetic resources.

Pierre Walckiers (FNRS/UCLouvain)

Illustration - Chloé Mauyt

#### **Presentation outline**



## Analyses of Intellectual Property Rights (IPR):

Promotes "Western" positivist knowledge systems (Shiva 2016)

Cases of biopiracy and biocolonialism involving Traditional Knowledge (TK) and the genetic resources of Indigenous peoples and local communities (IPLC) (Whitt 2009)

#### Domain:

Focus on Agrifood IP Law, International Law on Plant Genetic Resources



## Interdisciplinary methodology

Philosophy of Law and Science, in line with the *Ontological Turn* (Escobar 2018):

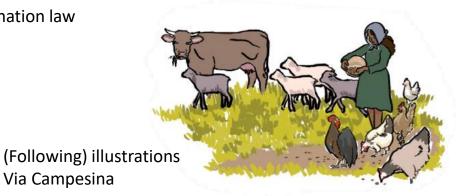
- Normative function of sciences (Foucault 2014; Tuhiwai Smith 2012)
- Epistemic inclusivity
- Taking the question from a legal point of view:
- Human right to Science
- Nondiscrimination law



## Research questions/objectives

How do IPR perpetuate epistemic injustices by promoting a specific, Western conception of Knowledge and innovation, thus marginalizing TK in the agri-food system? (RQ1)

Could the law offer tools to remedy these epistemic injustices? (RQ2)



## **Theorical Framework**

#### Minimal definition of "Traditional" and "Western" Knowledge

#### Intermediate step in our legal reasoning:

- Attempting to construct minimal definitions of "traditional knowledge" and "Western/scientific knowledge"
- Recognizing the difficulty and limitations of defining traditional knowledge, or the risks of scientism, eurocentrism or essentialism (Battiste and Henderson 2000)

#### Western/positivist science

- Refers to "science" understood in a universal, anhistorical and non-cultural sense
  - This is an approach situated in the Western context.
- Dualism, reductionism and externality, where the scientist claim objectivity, value-free view of the world,
  - Disqualifying TK
- Positivist" science dominates legal systems;
  - Despite many criticisms of (Western) philosophy of science (Haraway, Jasanoff, Stengers)

#### **Traditional Knowledge**

- Minimal definitions and common characteristics: community centrality, relational and holistic dimensions, and intergenerational transmission (Oguamanam 2006)
- WIPO definition :
  - "knowledge, know-how, skills, and practices passed down within a community, often forming part of its cultural or spiritual identity"
  - Recognition is the result of a long epistemic and political struggle, preceding political and economic valorization.



# Traditional knowledge and Western science in intellectual property law

## Agrifood IP Law, International Law on Plant Genetic Resources The Regime Complex (Raustiala & Victor 2004) of plant genetic resources for agriculture (PGRFA)

#### **International IP Law:**

- General Framework & Patent protection: Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)
  - Art. 27: "patents shall be available for <u>any inventions</u>, whether products or processes, in all fields of technology, provided that they are <u>new</u>, <u>involve an inventive step</u> and are <u>capable of industrial application</u>"
  - Regional Level: European Patent Convention (EPC, Art. 52) (Not EU!); EU directive on biotechnology (Directive 98/44)
    - Example at ECP/EU level: concern invention related to plants (if not limited to a single varieties"; "product-by-process" plant that is not "exclusively obtained by means of 'essentially biological process" (Pepper Case); invention on products consisting of biological material.
- Plant Variety Rights (PvP): International Union for the Protection of New Varieties of Plants (UPOV)
  - PvP for new varieties that meet the DUS criteria (UPOV, Art. 6-9)
  - Regional Level: Community plant variety right (CPVR)
- Narrative/justification: Research and development in agrifood is lengthy and costly, breeders must have returns on their investment (Frison 2018)



# Agrifood IP Law, International Law on Plant Genetic Resources The Regime Complex of PGRFA

#### **Access and Benefit-Sharing (ABS):**

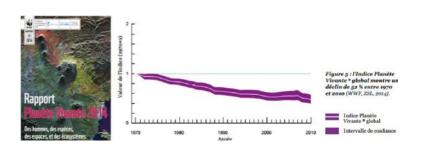
- For all genetic resources: Convention on Biological Diversity (CBD) and its Nagoya Protocol on Access and Benefit Sharing (NP)
- Specialized instrument for PGRFA: International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
  - Genetic resources are under the sovereignty of States, and rules for access and fair and equitable sharing of national resources must be implemented.
  - Sovereignty of States over their natural resources (CBD, Art. 15)
  - Access to genetic resources: bilateral and multilateral approaches (NP vs ITPGRFA)
- Narrative/justification: Genetic resources are under the sovereignty of States, and rules for access and fair and equitable sharing of national resources must be implemented.

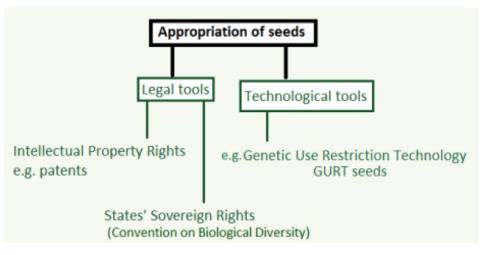


#### Agrifood IP Law, International Law on Plant Genetic Resources The *Regime Complex* of PGRFA

### Conflicts: Access and Benefit Sharing vs Intellectual Property Rights

- Intellectual property rights (UPOV and TRIPS) promote seed appropriation (legal tool) alongside appropriation technologies (GURT seeds).
- Exceptions are strictly interpreted
  - ECP "essentially biological processes": broccoli, tomatoes, and pepper cases
  - Breeder's rights > Farmers' privilege (UPOV) farmers' rights (ITPGRFA)
  - New genomic techniques as patent event;
- IPR favor an extractivist and productivist model of agriculture, which is unsustainable and blocks any Commoning.

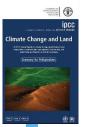




(Frison 2020, 54)







#### Traditional knowledge within the Regime Complex

#### **Intellectual Property Rights**

- Intellectual property rights directly threaten TK and IPLC:
  - UPOV does not protect seeds of 'common knowledge' and restricts informal seed exchanges between farmers (strict interpretation of farmers' privilege)
  - IPR provide exclusive rights to inventors of new inventions capable of industrial application... for "cooked"/"translated" knowledge in western-type innovation (Sunder 2007)
- IPR protect only *indirectly* TK and IPLC.... "unofficial innovation" (Correa 1994, 30):
  - Patent disclosure requirement ...via the new WIPO TK Treaty (Art. 3)
  - Geographical Indications (TRIPS, Art. 22.1)
  - Cultural property and expression of folklore (UNESCO, WIPO)

#### Traditional Knowledge (TK) and Access and Benefit Sharing:

- Respect, preserve, and maintain knowledge, innovations, and practices of indigenous and local communities (CBD, Art. 8 (j))
- Prior and Informed Consent, mutually agreed terms for access to genetic resources (CBD, NP)
- Farmers' rights to "save, use, exchange, and sell farm-saved seed/propagating material" subject to national legislation (ITPGRFA)



# WIPO Member States Adopt Historic New Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge

WIPO member states today [24/05/2024] approved a groundbreaking new Treaty related to intellectual property (IP), genetic resources and associated traditional knowledge, marking a historic breakthrough that capped decades of negotiations.



Indirect protection: IPR should not be fraudulently granted to innovations based on this traditional knowledge

#### **Selective integration and Legitimacy:**

"Recognizing the potential role of the patent system in contributing to the protection of genetic resources and traditional knowledge associated with genetic resources,"

The new WIPO genetic resources and associated traditional knowledge treaty: a symbolic and modest step toward an inclusive and just IP system (Oguamanam 2024).



# Discussion

#### **RQ1: The Biocolonialism of IP Systems**

- IPR favor a Western approach to property and innovation, which does not include other forms of knowledge (Ewens 2000, Jefferson 2023)
  - Innovation-centered approach to creativity and knowledge (Shiva 2006)
  - Traditional Knowledges do not necessary match with "new," "inventive" and "capable of industrial applications" (TRIPS, 27.1; Oguamanam 2006)
- Example: "Raw" and "cooked knowledge" in PGRFA Regime Complex
  - IPR on GMO, improved plant vs raw material as 'common heritage' of humankind or plant varieties of "common knowledge" (Whatemore 2002; Aoki 2009)
- IPR and the spectrum of **biopiracy** and **biocolonialism** (Whitt 2009):
  - Under the guise of legal neutrality and scientific neutrality, IPRs will favor the appropriation of genetic resources and traditional knowledge, and also disqualify traditional knowledge in relation to "true" scientific knowledge.

#### RQ2: Law as a tool to remedy these?

- **Epistemic inclusivity**: "I see science as a pluralistic endeavor that refers to different ways of 'knowing'. For me, it is not limited to modern Western science, but includes the knowledge systems of various cultures at different periods in history" (Shiva 2016, 25).
- Exploration of the right to **non-discriminatio**n and the **human right to science**:
  - Human Right to science (Besson 2024):
    - The Universal Declaration of Human Rights (Art. 27(1)) Soft Law/customs:
    - "Everyone has the right freely to <u>participate</u> in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. → **Active participation**
    - Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."
    - International Covenant on Economic, Social and Cultural Rights (Art; 15(1)(b)) Hard law :
    - "To enjoy the benefits of scientific progress and its applications;" → passive redistribution
  - Non-discrimination:
    - International Covenant on Civil and Political Rights (Art. 26) Hard Law

Human Right to Science and non-discrimination to redefine what constitutes "good science," which, in our view, should be understood in a pluralistic, inclusive, and decolonial manner.

... still room for improvement (Besson 2024)



## Conclusion

#### References

Aoki, Keith. 2009. "Seeds of Dispute: Intellectual-Property Rights and Agricultural Biodiversity Symposium Edition: Farming and Food: How We Grow What We Eat." *Golden Gate University Environmental Law Journal* 3 (1): 79–160. https://heinonline.org/HOL/P?h=hein.journals/gguelr3&i=81.

Battiste, Marie, and James (Sa'ke'j) Youngblood Henderson. 2000. *Protecting Indigenous Knowledge and Heritage: A Global Challenge*. Purich Publishing Ltd.

Besson, Samantha. 2023. "The 'Human Right to Science' qua Right to Participate in Science: The Participatory Good of Science and Its Human Rights Dimensions." *The International Journal of Human Rights* 0 (0): 1–32. https://doi.org/10.1080/13642987.2023.2251897.

——. 2024a. "Le Droit International de La Science." In *Cours Au Collège de France*. Paris: Collège de France. https://www.youtube.com/watch?v=bBgkH7jWNLY.

Escobar, Arturo. 2018. Sentir-penser avec la Terre. L'écologie au-delà de l'Occident. Paris: Seuil.

Foucault, Michel. 2014. On the Government of the Living: Lectures at the Collège de France, 1979-1980. Edited by Michel Senellart. Translated by Graham Burchell. Basingstoke New York, NY: Palgrave Macmillan.

Frison, Christine. 2018. Redesigning the Global Seed Commons. London: Routledge.

Oguamanam, Chidi. 2006. International Law and Indigenous Knowledge: Intellectual Property, Plant Biodiversity, and Traditional Medicine. Toronto: University of Toronto Press.

Shiva, Vandana. 2016. Biopiracy: The Plunder of Nature and Knowledge. Berkeley, California: North Atlantic Books.

Tuhiwai Smith, Linda. 2012. Decolonizing Methodologies: Research and Indigenous Peoples. 2nd ed. London: Zed Books.

Whatmore, Sarah. 2002. Hybrid Geographies: Natures, Cultures, Spaces. London: SAGE.

Whitt, Laurelyn. 2009. Science, Colonialism, and Indigenous Peoples: The Cultural Politics of Law and Knoledge. Cambridge: Cambridge University Press

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