

IMPROVING THE PROTECTION OF TRADITIONAL KNOWLEDGE: INTELLECTUAL PROPERTY RIGHTS AND THE RIGHT TO FOOD

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SUMMARY

This brief paper seeks to convey three messages. First, traditional knowledge, innovations and practices (TKIP) relating to food and agriculture are widespread, viable and sustainable. Although the traditional communities are the main beneficiaries in terms of food security through production and availability of a reliable supply of *nutritionally diverse* food and income generation, *we are all gainers* from the persistence of TKIP and the traditional agricultural and food systems for which TKIP forms the basis. This is because these systems apply, maintain and even increase agricultural biodiversity in their natural conditions. All agricultural systems, including the modern industrial ones prevalent in Europe and North America, Australia, Southern Brazil and Argentina, are ultimately reliant for their long-term sustainability on such biodiversity. Furthermore, they are low input and sustainable systems so that large human populations are supported without depleting the Earth's natural endowments or contributing to climate change.

Second, the erosion of TKIP has dire implications for the right to food of traditional rural communities. Indeed, a full exercise of the right to food requires the maintenance of traditional agricultural and food protection systems of which TKIP forms the basis.

Third, the prevailing intellectual property regime, including TRIPS and the current spate of free trade and economic partnership agreements, makes absolutely no contribution to the protection of TKIP and may even have detrimental effects. This represents a policy failure, one that ought to be countered. The paper concludes with some proposals in relation to TKIP and intellectual property rights in the furtherance of the effective implementation of the right to food.

Traditional Knowledge: Adaptive, Innovative and Sustainable

Traditional cultivation systems are based on extensive knowledge of natural processes and resources acquired, transmitted and improved upon through the generations, enabling millions of people to subsist in the same – and often hostile – environments over long periods of time. For example, “African farmers developed an extensive and deep body of knowledge about those resources. This knowledge had evolved over the years and was based on rational observation and experimentation.”² The same is true for traditional farmers elsewhere in the world.

Traditional rural societies are not just storehouses of old knowledge handed down through the generations. The circumstances that rural communities face can change drastically and people must try to adapt in creative ways. For example, extreme weather conditions caused by climate change, outbreaks of crop disease, new epidemics, and globalization all pose sudden and unexpected challenges that these societies have no choice but to overcome, as they so often do.

Many communities are adept at combining existing local knowledge with innovations from elsewhere, and in novel ways. Thus, members of Mende farming communities in Sierra Leone effectively continue to manage agricultural genetic diversity as they experiment on-farm with traditional *and modern* rice varieties, and produce their own varieties that often perform better than those provided by agricultural extension services. For many people, the present reality, as anthropologist Paul Richards observes, is that “poor agrarian districts of the globe are rich in biodiversity and poor in human resources”. Such an assumption leads many people to assume that “scientific breeding, undertaken by a remote elite on behalf of the poor, is one way round this assumed poverty of human resources.” Accordingly, “breeders make the clever choices, and all farmers do is plant what they provide.” But is this the best way? Arguably not. When this happens, opportunities are being lost and the results are likely to be counterproductive with more hunger rather than less, and increased malnutrition due to the replacement of diverse polycultural systems offering nutritious diets with monocultures with much poorer diets. For his part, Richards considers that the problem may be conceived wrongly; in fact the Mende show us “that the human capacity to combine, select and screen

planting materials is locally present in hyper-abundance.”³ Humankind can gain much, he argues, from tapping into this under-exploited capacity. The tragedy is that this is so rarely done. Instead, top-down and even coercive approaches are adopted based on inappropriate technologies, policies and regulations.

Erosion and Loss: The Need for Action

The resilience and adaptability of traditional societies have enabled hundreds of millions of people past and present to live worthwhile lives. But in the face of intense social change, often imposed from outside, local knowledge is rapidly being lost; while it is being replaced by new knowledge much of which is undoubtedly useful, it is not being saved quickly enough. Many factors contribute to this state of affairs; among them are migration, rapid social-economic change accompanied by deskilling, the spread of market economies that commercialize agriculture by introducing export crops for the obesity-afflicted North and Green Revolution technologies, all-too prevalent assumptions that Western agricultural techniques and methods are superior to local ones, the imposition of inappropriate laws and regulations by governments, and of course war. This situation is a tragedy. Development opportunities are being squandered. Moreover, as rural populations find it harder and harder to live on the land, they are moving at an unprecedented rate to the cities, where insufficient jobs are being created to absorb them. Among the main outcomes are hunger and malnutrition.

Rural traditional knowledge holders and their communities tend to be poor because of their marginal status *and not* because their livelihood practices when appropriately supported are unviable. Institutions that could help them are weak or non-existent. Thus, finance and credit are generally unavailable. They often lack secure property rights to land, and enforceable intellectual property rights to their knowledge. In some countries, rules require businesses to share the benefits arising from their commercial use of local knowledge and innovations with the local people. Unfortunately, rural people rarely have any idea of their legal entitlements in this regard and have little experience in negotiating with industry. Infrastructure, like good transport links, is often inadequate. And people have few opportunities to exchange knowledge and innovations with others facing similar development-related challenges outside their locality and their nation. This is important, as

innovative environments tend to be those where knowledge can flourish and flow without more restriction than is necessary to ensure that innovators get a fair return.

Countless examples illustrate the problems. A study in Western Niger, which surveyed two mixed-farming communities not far from the capital of Niamey, highlights some of the challenges.⁴ Farmers there have a comprehensive and accurate knowledge of the soils and soil fertility management, cultivation, forestry, and animal husbandry. But financial limitations keep them from applying their knowledge on a greater scale, as do other constraints like the systems governing land tenure and livestock ownership. Many communities and development workers around the world have similar stories to tell.

Intellectual Property Rights

Ways must be found to support traditional agricultural and food systems. This should be done (i) by protecting the knowledge base, and (ii) by helping traditional communities benefit from local innovations and practices by encouraging their wider use and/or by harnessing people's creative capacities to produce new ones.

Do patents and plant variety protection (PVP) help? The reality is that in their present form neither makes any contribution to the realisation of either of these aspirations. These rights are almost universally unavailable to traditional communities to protect their own varieties. On the other hand, they may be used to *undermine* livelihoods whose viability is the only secure way for members of many traditional communities to enjoy their rights to food. For traditional farmers saving and across-the-fence and inter-community exchanging of seed are common and necessary practices. And as we saw with the Mende example, modern varieties may be used in "traditional" breeding and cultivation practices and it would be highly desirable if they could still freely be able to do so. It would also be fair. After all, modern breeders have wide freedom to use traditional varieties without payment. Although the UPOV system may allow on-farm replanting, its rules restrict farmers' freedom to buy seed from sources other than the original breeders or their licensees such as village markets and neighbouring farms. As for patents, even replanting is likely to be prohibited.

Seed companies argue in response that farmers do not have to purchase PVP-protected seed just because it is available. They point out that the farmers are free to continue cultivating non plant variety-protected seed, including traditional local varieties, if they so wish. While this is likely to be true, traditional varieties are often disparaged and are likely to be excluded from government-approved seed lists that some countries maintain under their seed regulations. While finding non PVP protected seed may not yet be a serious difficulty for developing country farmers, this situation may change. In some developed countries, it is becoming difficult for farmers to find non PVP-protected varieties of some crops. This incidentally raises the issue of seed laws that may sometimes unduly limit the choice of varieties that farmers are allowed to bring into commercial production. Furthermore, in many developing countries, governments concerned at rural poverty and convinced that traditional agriculture is unproductive support farmers in rural credit schemes by promoting particular crops and types of seed, such as hybrids which tend to require expensive inputs and may not be suitable for the local agronomic conditions. Also seed aid is often used by providers as a way to promote the use of modern varieties that may not necessarily be the most appropriate ones to plant.

POLICY RECOMMENDATIONS

All countries have the sovereign right *and* the international obligation under the international law of human rights to put in place rules and regulations that enhance the right to food, *especially of their most vulnerable populations*. Such a stance also makes for good policy. Members of these populations are among those whose knowledge, innovations and practices do most to provide food security to the wider populace of each country and even to humankind as a whole. It follows that governments have the right and obligation to reject international pressure to introduce rules that undermine food security.

An indispensable element of supporting this right is to evaluate the impacts of intellectual property rules on traditional knowledge, innovations, practices and agro-food systems. It would appear to be common sense in light of the potential dangers that a precautionary policy be adopted. The burden of proof should lay on advocates of strengthened intellectual property protection to show that knowledge, innovations and practices underpinning the traditional agro-food systems are supported, or at least not

weakened, by the intellectual property rules relating to agriculture they demand to be introduced. But this is not enough. All domestic stakeholders and *especially traditional farmers and their communities* should be active participants in decision-making in this area.

In light of these points, the following recommendations are offered:

1) Bilateral and regional free trade/ economic partnership agreements

These kinds of agreement should not contain provisions that require intellectual property protection of plants, animals and plant and animal varieties. As for TRIPS, developed countries should undertake *not to* challenge measures taken by developing countries to keep food and agriculture as far as possible outside of the intellectual property regime, and to accept that the *sui generis* system need not be equivalent to the 1991 Act of the UPOV Convention.

2) Development Impact Assessments

All developing country governments are introducing or revising intellectual property rules. They may be importing foreign rules relating to food and agriculture such as those of the European Union or the United States without any adaptations at all or with only minor ones. They may have such rules in place already but are undergoing a process of strengthening them in accordance with commitments imposed from outside. Alternatively, as would be the ideal, they may be planning to devise modified or completely new rules with the specific aims of supporting domestic rural development and benefiting traditional communities. In either of these cases, governments should consider carrying out Development Impact Assessments (DIAs) or what we might alternatively call Human Rights Impact Assessments (HRIAs).⁵ Technical cooperation funded and/or provided by international agencies and governments should assist in the production of such assessments.

DIAs should comprise two elements, the first being the assessment itself. The second is the on-going consultation process involving stakeholders and independent experts. The assessment would lay out the *benefits, costs* and *risks*, but would not be just descriptive and

analytical. It would of necessity be prescriptive by feeding into policymaking, and it must be independent.

The consultation process should be multi-stakeholder and democratic, ensuring that all groups with an interest and expertise to offer including the poor, in this case traditional community members especially, and consumers have the opportunity to design, influence, monitor and review the process.

ENDNOTES

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² Brokensha, D. 1999. "What African farmers know," in D.A. Posey, ed., *Cultural and Spiritual Values of Biodiversity*, Nairobi & London: UNEP & IT Publications.

³ In this paragraph all the quotes are from Richards, P. 1999. "Casting seeds to the four winds: A modest proposal for plant genetic diversity management," in Posey, ed., *Cultural and Spiritual Values of Biodiversity*.

⁴ Lamers, J.P.A., P.R. Feil & A. Buerkert. 1995. "Spatial crop growth variability in Western Niger: The knowledge of farmers and researchers," *Indigenous Knowledge and Development Monitor* 3(3).

⁵ For more information on DIAs, see Dutfield, G. 2008. "Making TRIPS work for developing countries", in G. Sampson & W.B. Chambers, eds, *Developing Countries and the WTO: Policy Approaches*. United Nations University Press.