Intellectual Property, Traditional Knowledge, Research & Development and Food Security in Pacific Island Countries

Sue Farran, Professor of Laws, University of Northumbria, UK

Introduction

The link between food security and intellectual property and innovation may not at first seem obvious, and indeed food security cannot or should not be seen as an isolated concern but as integral to various other contemporary issues concerning Pacific island countries (PICs), especially trade and development, climate change and the movement of people. Once these issues are understood then it is possible to look critically at the relationship between present and proposed intellectual property regimes and present and future food security. It is here that quite crucial questions arise about the dynamics of legal development and the power and influence of various influences and players. It is only once these are recognised that proposals might be mooted which seek to balance pragmatism with idealism and suggest a way forward for PICs on this area of national and international concern.

Issues of food security

Food security can be understood in a number of different ways. The WHO define it as existing when:

> "All people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life". Commonly, the concept of food security is defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences.[i]

while the FAO defines food security as existing when:

> "...all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".[ii]

Food security is directly linked to levels of poverty. UNESCAP suggests that 'the most broadly used standard for measuring poverty in practice is likely to continue to be the adequate consumption of food and other essentials.'[iii] In the Summit Report on Food Security in the Pacific, it was estimated that 2.7 million (out of an approximate 10 million people in the Pacific) were in poverty.[iv] Increased prices of imported foodstuffs and fuel – affecting cooking and transport of foodstuffs - has a proportionately higher impact on these countries than on more affluent ones.[v] Moreover, higher food prices have cascading effects on development across the board, leading to regressions in standards of education and health.[vi] Food security is therefore crucial to the futures of Pacific islands people. At the same time connections are being made between trade and poverty in the region. OXFAM for example has stated:

> Many Pacific Island countries are being pressured by rich countries through the World Trade Organisation to make commitments to further open their economies to foreign goods and services. This will mean Pacific governments will lose much-needed revenue to invest in basic services. They will also lose control over trade policies that will help them develop their economies and end poverty.[vii]

There is also a link between food poverty or food insecurity and vulnerability poverty. This can be understood as meaning that people are:

> vulnerable to circumstances such as natural disasters, national and international economic downturns, fluctuations in remittances and tourism, civil conflict and changes in international aid distribution. This kind of vulnerability highlights how poverty is not an absolute state but one that is related to circumstances.[viii]

In the Pacific the circumstances include climate change.

<u>Climate Change</u>

All PICs are subject in some way to the effects of climate change, either due to salt-water inundation, or the more frequent incidence of cyclones, irregular rainfall patterns and changing temperatures,[ix] and the FAO has explicitly stated that:

> Careful consideration must be given to the impact of climate change on food security, and building the resilience of the agriculture, fisheries and forestry sectors to safeguard food security in a time of multiple crises and risks. [x]

In combination therefore trade-driven intellectual property laws, climate change, demographic and economic factors are all likely to have a significant adverse effect upon food security in the Pacific.

The meaning and significance of food security in the Pacific

Regional focus on food security emerged in 2008. A Framework for Action on Food Security was developed and drafted between 2008 and 2010, and at the Inaugural Pacific Food Summit, held in 2010 in Vanuatu,[xi] it was recognised and agreed that:

> In the Pacific . . . food security is being threatened by declines in traditional crop production, increased dependence on imported foods, growing vulnerability to climate change, overfishing and illegal fishing, volatility in international commodity prices, and failure to enact and enforce food safety and quality standards.

It was acknowledged that one of the keys to food security was to promote, facilitate and preserve the growing of indigenous food crops and to encourage the cultivation of varieties which would withstand climate change, pests and disease while also offering a balanced diet. This plan of action is directly impacted by trade-driven intellectual property laws.

The relationship between present and proposed intellectual property regimes and present and future food security

Concerns at local and regional level have been articulated about food security and the need to protect traditional knowledge and indigenous intellectual property. However there is little connectivity made between trade, intellectual property and food security. This is due partly to

the disjunction between different government ministries and departments and partly to the failure to recognise that intellectual property legal obligations incurred under trade treaties could have direct consequences on the future food security of the region.

In the context of food security, the law of patents and plant breeders' rights is particularly relevant but so too are copyright, trademarks, and geographical indicator regulation. While all PICs are affected to some extent by these trade related legal demands, WTO member countries are most likely to be worst affected because WTO membership requires laws that comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). This includes control ownership and rights of use of genetic resources and plant varieties. While WTO members may include plants and genetic resources within patent law or put in place their own specific (*sui generis*) law or a combination of measures,[xii] there is pressure to sign up to an agreement developed by the major plant breeders known as UPOV.[xiii] UPOV protects the rights of plant breeders who develop plant varieties which are new, distinct, uniform and stable (article 5 (1)). UPOV is favoured by commercial plant breeders because its requirements are easier to comply with than those of patents, so it is easier for these breeders to secure monopolies. By contrast it is more difficult for farmers to bring their own plant varieties under UPOV protection because the requirements of stability and uniformity present obstacles to the varieties they develop as these tend to be variable and lacking uniformity.

UPOV is particularly unsuitable for the Pacific region. Many food crops are not grown from seed but from plant-stock propagation, and the possible exemptions are of little relevance. For example, the 'farmers' rights' exception (article 15, 1991 UPOV) under which a state can restrict breeders' rights "in order to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting (. . .) the protected variety," does not extend to the traditional practice of the sharing or exchange of propagating material. Similarly, the 'research exemptions' (art 15(1)(i) and (ii)) is of little relevance to countries with minimal research and development capacity. The only exemption which might be useful is the public interest exemption. To be used effectively however, this needs strong political will, coordinated lobbying and national and international support.

The UN Special Rapporteur on The Right to Food has observed "No State should be forced to establish a regime for the protection of intellectual property rights which goes beyond the

minimum requirements of the TRIPS Agreement" and has expressed the view that "free trade agreements obliging countries to join the 1991 UPOV Convention or to adopt UPOV-compliant legislation, therefore, are questionable."[xiv] The reality is that PICs seeking membership of WTO are unlikely to be in strong bargaining positions. Even where PICs are not seeking WTO membership, other trade negotiations (for example, PACERPlus and EU-ACP Agreements) with countries which themselves are constrained by TRIPS are likely to want equivalent intellectual property law commitments from trading partners

Balancing pragmatism and idealism: a way forward for Pacific Island nations

The use of non-traditional intellectual property regulations has two potentially negative consequences for food security in PICs: firstly these regulations exclude PICs (along with other developing countries) from access to essential resources due to their protective and prohibitive features. Secondly traditional knowledge used to promote food security does not fall within the scope of these laws with the consequence that either: the food products of that knowledge are traded without appropriate acknowledgment; or traditional knowledge is constrained within an unsuitable regulatory framework which undermines the value of such knowledge (for example, the principles of sharing, communal and inter-generational knowledge transfer rather than individual ownership; timelessness rather than fixed points in time for origin and expiry; and exchange rather than financial return).

A focus on these forms of intellectual property regulation also marginalise traditional practices for encouraging bio-diversity and the exchange of plant material, and ignore local initiatives which could ensure brighter future for food security in the region. Among these are initiatives to secure germplasm or plant samples in 'banks', and projects being developed by CePACT (Centre for Pacific Crops and Trees) to develop new plant species which are more resistant to climate change and to other problems affecting and depleting other food crops. There are also national programmes which could be adapted elsewhere, for example the Kastom Gaden Association in Solomon Islands;[xv] the Island Food Community of Pohnpei;[xvi] and renewed focus on kastom economy and island food in Vanuatu.[xvii] These projects have mixed aims and agendas but share an interest in promoting local foods through cultivation and use, and identify the need to conserve crop varieties and improve access to plant resources.[xviii]

Conclusion

The intellectual property regimes which impact directly on food security are shaped by the developed world and primarily serve to protect the vested interests of corporations which develop seeds, pesticides, fertilizers and GM crops. In particular, the current regime divorces seed and plant development from farming or food growing. The funding mechanisms for research into climate change resistant food crops (e.g. drought tolerant cops) seem to ignore the argument that the food resources of the world should belong to the global commons. The primary focus on trade with seemingly little or no emphasis on social welfare within the rhetoric of economic development has resulted in the un-coordinated development of national policies. At the same time, the increasing dependency on aid for most PICs is severely undermining autonomy in inter-national interactions. Until the inter-connectedness of factors which affect food security is recognised and the various stakeholders including farmers, researchers, trade and legal experts, community leaders and policymakers consult each other in a meaningful way to make and take informed policy positions, there is a danger that the risks will not be adequately addressed.

[i] http:< //www.who.int/trade/glossary/story028/en/>
[ii] World Food Summit 1996.
[iii] UNESCAP 'Beyond Subsistence Affluence: Poverty in Pacific Island Countries' *Bulletin on Asia-Pacific Perspectives 2003/04* p 41 <http://www.unescap.org/pdd/publications/bulletin03-04/bulletin03-04_ch3.pdf>
[iv] FAO/WHO/UNICEF/PIFS 'A Pacific Food Summit 2010; Facilitating Action for a Food Secure Pacific' 12 May 2009 <www.foodsecurepacific.org.> 4
[v] UNICEF, *Situation Reporting: Food Price Increases/Nutrition Security in the Pacific Islands'*(Report No.1) (Suva, Fiji, 2008).
[vi] OXFAM, *Food Price Increases in the Pacific Islands' Situation Monitoring Report* (April 2011) <http://www.unicef.org/pacificislands/FINAL_SITUATION_REPORTING2.pdf.>
[vii] OXFAM New Zealand <http://www.oxfam.org.nz/what-we-do/where-we-work/poverty-in-the-pacific>above.
[viii] Good L (2003). Poverty in the Pacific – an analysis. Pacific Issues Paper No 6. Directorate General for Development, European Commission April 2003. <http://www.ecsiep.org/documents/resource/06_poverty.pdf >
[ix] See CSIRO (Commonwealth Scientific and Industrial Research Organisation (Australia)) *New Insight into Climate Change in the Pacific* 25/11/ 2011, <http://www.csiro.au/Portals/Media/New-insight-into-climate-change-in-the-Pacific.aspx.>

[x] FAO 2009 'Climate Change and Food Security in the Pacific' FAO/SPREP/SPC/USP Policy Brief
[xi] For the *Meeting Report of the Pacific Food Summit* (WPDHP1002530-E Report Series Number: RS/2010/GE/22(VAN)) see: http://www.wpro.who.int/internet/resources.ashx/NUT/Pacific+Food+Summit+Report.pdf. 1.
[xii] Article 27 (3)(b) TRIPS.
[xiii] Union Internationale pour la Protection des Obtentions Vegetales. UPOV goes beyond TRIPS, but may be mandated by WTO accession negotiations.
[xiv] Special Rapporteur, A/64/170, 15.
[xv] Formed in 2001 this operates locally and through a Melanesian network of farmers. http://kastomgaden.org/about/.
[xvi] This community based project includes projects to document pandanus and banana varieties in order to build a data base of plant resources in order to protect their gene bank.
[xvii] 2007-8 were for example declared years of the Kastom economy in Vanuatu. See R. Regenvanu 'The Year of the Traditional Economy: what is it all about?'http://www.vanuatuculture.org/site-bm2/trm/20070207_kastom_ekonomi.shtml
[xviii] See L. Kaufer, L. Englberger et al 'Evaluation of a "Traditional Food for Health" Intervention in Pohnpei, Federated States of Micronesia' *Pacific Health Dialog* April 2010, Vol. 16, No.1. p 61; and T. Jansen and M. Q. Sirikolo (eds). "Petanigaki ta Siniqu ni Lauru "or "The Forest Foods of Lauru" published by the Kastom Gaden Association (KGA) and Terra Circle Inc., of Australia, 2011.

Published by CTA, *http://knowledge.cta.int/*
Edited by J.A. Francis, CTA
Citation: CTA 2014. *http://knowledge.cta.int/*, "author" accessed on "date."