ECOSYSTEM SERVICES: A POSSIBLE NEW APPROACH IN THE VALUATION OF COMPENSATION FOR LAND EXPROPRIATION IN CAMEROON

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Introduction

Ecosystems such as forests are recognised as an important part of cultural and natural heritage.[1] Different countries have different ways of preserving these ecosystem services and ensuring that they are managed in a way that is beneficial to the public. One approach that is increasingly being considered is Payment for Ecosystem Services (PES), a system that aims to recognise the contribution of landowners and managers in enhancing these ecosystem services around the world. In other words, PES is a mechanism whereby payment is provided to encourage landowners and managers to refrain from land management practices that have a negative impact on these services, thereby providing benefits for the public or specific beneficiaries.

In Cameroon, the current approach to preserving ecosystem services also entails the expropriation of land to secure its management in the public interest subject to the payment of some form of compensation for the work that has been done to the land over the years. Although the expropriation procedure was not initially designed specifically for land, it is increasingly being used to supplement the forestry laws and to place forested land that is valuable either as a commercial asset for timber or for other reasons, such as the protection of biodiversity, under the control of the State. One key feature of this process is the limitation on who can or cannot be compensated for the loss of their interests in the land. Although such expropriation is subject to the payment of compensation, the law does not recognise all those with a vital interest in the land as having legal rights entitling them to compensation.

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[1] For more on the nature and extent of forest ecosystem services, see A Shvidenko, C V Barber and R Per, 'Chapter 21: Forest and Woodland Systems' in R Hassan, R Scholes and N Ash (eds), *Ecosystems and Human Well-Being: Current State and Trends: Findings of the Condition and Trends Working Group*, vol 1 (Island Press, Washington, D.C. 2005) 587-621.

Even when there is a right to compensation, the valuation tests used do not take into account the different interests that contribute to the value of the land. Under the current law, compensation for expropriation is comprised of the value of crops, the value of 'worthy' buildings and other installations, the selling price of undeveloped land in urban areas and the cost of obtaining a land certificate for land that was held under customary tenure. This means that the "real" value of the land is ignored, with the law taking account of only a very narrow and artificially created set of "commercial" interests and market values attributed to only a few of the uses and interest affected by the expropriation. This system of valuation misses on occasion the value of land as providing livelihoods to others and benefits to the community as a whole.

This article aims to challenge this position both in terms of it being a misapplication of the current law and by arguing for a change in the law. Specifically, it is argued that although not recognised as legal rights under the expropriation regime, customary rights remain part of the land tenure system in Cameroon. The valuation tests used to calculate the different interests that contribute to the value of the land to the customary owners and others are also considered, and, using examples from the United States of America (USA) and South Africa, it is argued that the existing set of interests and values considered in the payment of compensation do not reflect the true value of the land expropriated. The notion of ecosystem services as a new interest in land is then considered as one approach to dealing with the inadequacies of the current law before drawing some conclusions. The paper begins, with an overview of the land tenure system in Cameroon and the nature of the customary interests in land under the existing law.

Background: the Nature of Land Rights in Cameroon

Land in Cameroon is governed by a set of laws collectively referred to as the Land Ordinances. These include:

- Ordinance No. 74/1 of 6 July 1974 to establish rules governing land tenure;
- Ordinance No. 74/2 of 6 July 1974 to establish rules governing State Lands; and
- Ordinance No. 74/3 of 6 July 1974 concerning the procedure governing expropriation for a public purpose and the terms and conditions of compensation.[2]

[2] Hereinafter referred to as the Land Ordinances.

Since their enactment, the various shortcomings of the Land Ordinances have been highlighted in numerous articles.[3] The law illustrates the widespread inconsistencies in Government decision-making, and, coupled with other practical difficulties such as a dysfunctional judiciary it places serious limits on property rights. The common feature here is the division of land into three broad categories, private property, public property and "national lands". Private property now covers only land for which a land certificate has been issued[4] while public property consists of all personal and real property which, by their very nature (e.g. coastlands; waterways; sub-soil and air space) or intended purpose (e.g. easements), is set aside either for the direct use of the public or for public services.[5] Land that has not been registered as private or public property reverts to the common pool of "national lands" and this includes land still held by virtue of a customary tenure. For the purposes of this article, lands held by customary tenure are of particular importance.

Legality of the Customary Interest in Land

To define "national lands", Articles 14 and 15 of Ordinance No. 74/1 state that:

> 14(1) National lands shall as of right comprise lands which at the date on which the present Ordinance enters into force, are not classed into the private or public property of the State and other public bodies.
>
> 14(2) National lands shall not include lands covered by a private property right as defined in Article 2 above.
>
> 15 National lands shall be divided into two categories: (1) Lands occupied with houses, farms and plantations and grazing lands, manifesting human presence and development; (2) Lands free of any effective occupation.

This means that occupied and unoccupied lands that are not registered are included in the category of national lands. The effect of this all-embracing notion of "national lands" is that a vast majority of Cameroonians who held land under customary law without any State-recognised document of title found their lands absorbed into national lands. It has been argued that this is sufficient to divest all customary rights holders of their customary

[3] See, for example, C Anyangwe, 'Land Tenure and Interest in Land in Cameroonian Indigenous Law'(1984) 27 CLR 29-41, 29; C N Ngwasiri and Y N Nje, *Advocacy for Separate Land Legislation for the Rural Areas of Cameroon* (A PVO-NGO/NRM Cameroon, Yaounde 1995) 3-15; C N Ngwasiri, 'The Impacts of the Present Land Tenure Reforms in Cameroon'(1984) Editions Clé CLR 73-85, 76; A J Njoh, 'The Political Economy of Urban Land Reforms in a Post-Colonial State'(1998) 22 Int J Urban Regional 408-24, 411. See also the case of *Amidu Lukong v Razel Road Construction Co. Ltd and MINAT* [2001] 1 CCLR Part 7 81.

[4] See Articles 2, 3 and 4 Ordinance No. 74/1 of 6 July 1974.

[5] Article 2 of Ordinance No. 74/2 of 6 July 1974.

ownership rights,[6] but not necessarily other rights (such as the rights to harvest timber products from such lands). However, a vast majority of the citizens have continued to occupy and use land as though customary ownership rights still exist and, as will been seen below, subsequent legislation is still drafted on the basis that such ownership does still exist.

Article 17 of Ordinance No. 74/1 gives customary communities and individuals the right to continuous occupation or use of lands that they had been peacefully occupying or using prior to the entry into force of the Ordinance. It also gives them the right to convert such interest into a land certificate. But a land certificate is not required to guarantee the right to peaceful occupation and use by customary communities and individuals. Nevertheless, in order to succeed with any application, the customary communities and individuals have to prove that they were in effective occupation or effectively exploiting the lands (including any forest lands) by 5th August 1974.[7] For some communities such as the indigenous Pygmy populations, even if they could afford the cost of applying for a land certificate, proving that they have been in effective occupation or effectively exploiting the forest (land) is very difficult due to their traditional hunter-gatherer lifestyles. The situation is even more complicated for individuals and customary communities on land classified as "unoccupied", where the only rights available to them are hunting and fruit picking rights which may also be limited if the land is assigned for different purposes.[8] For such lands, no land certificate can be issued even if occupation or use was claimed by these individuals or customary communities. It has, however, been held that where land is in possession of another, no land certificate can validly be issued in respect of that land without first revoking the right of the original occupier.[9] In the case where those lands are possessed by customary communities and individuals the only possible source of such rights would be customary title.

[6] C N Ngwasiri and Y N Nje, (n 3) 3-15; C N Ngwasiri, 'The Impacts of the Present Land Tenure Reforms in Cameroon'(1984) Editions Clé CLR 73-85, 75-76; and A J Njoh, 'The Political Economy of Urban Land Reforms in a Post-Colonial State' (1998) 22 Int J Urban Regional 408-24, 411.

[7] For a detailed analysis of the various procedures, see C F Fisiy, *Power and Privilege in the Administration of Law: Land Law Reforms and Social Differentiation in Cameroon* (African Studies Centre, Leiden 1992) 42-47.

[8] Article 17(3) of Ordinance No. 74/1.

[9] See the case of *Chief Molinge & 3 Others v Chief Musenja & 8 others* [2000] 2 CCLR 1. See also the case of *Adje Robert Acho v Rev. Ngwane Ediage Thomas* [1998] 4 CCLR 109, 112 where the Appeal Court upheld the decision of the Court of First Instance that Bernard Epie Ntungwe (a family member) who allegedly sold a piece of land to the Appellant 'was not the family head of the Kome-Mgome family'. He therefore, 'had no right of possession and could not dispose of any part thereof without the consent of other family members particularly the head of the family'.

The implication of the above argument is that customary owners are still holding land under the customary land tenure system.[10] This is significant because, although a land certificate is what now confers ownership, it has also been held that this is not the only possible proof of ownership.[11] In other words, even if it could be argued that a land certificate is the only objective proof of ownership, it is not the only basis of ownership since customary holding is one way of acquiring a certificate, implying that customary ownership rights are still recognised. The continuous occupation or use of land, which has been absorbed into the category of national land, grants customary communities and individuals a legal right to own the land. It is therefore fair to say that this right should be recognised in all legislation dealing with land ownership regardless of whether or not a land certificate exists. This is not, however the case, as for the purposes of expropriation and compensation, customary lands are treated as national lands and not as a distinct category of lands entitled to appropriate compensation.

The Notion of Compensation

The need for compensation may arise as a result of compulsory expropriation of land for logging operations or as a result of damage done in the course of logging operations (for example, as a result of breach of the specifications of the logging contract or of the management plan for a permanent or community forest).[12] Despite the legal status of customary ownership, however, the concept of expropriation on the grounds of public interest and the possibility of compensation that arises from that only apply to "national lands" or private lands.[13] In other words, they do not apply to customary ownership. The procedure for land expropriation is set out in Ordinance No. 74/3 and involves the extinguishment of existing titles and use rights over the land in question for overriding public interest[14] and in such cases subject to the payment of adequate compensation.[15]

[10] The conditions for obtaining a land title are set out in Decree No. 76-165 of 27 April 1976 to establish the conditions for obtaining land certificates and are general cumbersome and expensive for the customary land owner to fulfil. See further C Anyangwe, 'Land Tenure and Interest in Land in Cameroonian Indigenous Law' (1984) 27 CLR 29-41, 29-30.
[11] See *Mobit Jerry Docta v Alhadji Zakari Mana & 3 others* [2000] 1 CCLR 9.
[12] Section 65 of the 1994 Forestry Law.
[13] Article 18 of Ordinance No. 74/1, as amended by Ordinance No. 77/1 of 10 January 1977.
[14] Article 1(1) of Ordinance No. 74/3 of 6 July 1974. Questions have been raised over what the phrase 'public purpose' really means (see e.g. M Prouzet, 'L'Expropriation pour le Cause d'Utilisé Publique au Cameroun'(1972) 1 Cameroon Law Review 27-53, 27-33) and abuses of this notion have been widely documented (see e.g. C F Fisiy (n 7) 49-50; and *Fouda Mballa v Etat Fédéré du Cameroun Oriental* [1971] Arrêt No 160/A/CFS/CAY (Federal Supreme Court) of 8 June 1971).
[15] Article 7 of Ordinance No.74/2 of 6 July 1974.

Compensation is an important measure of fairness and justice. As a universal principle, it aims at making amends for any loss or damages suffered – in this case as a result of the action of the State or someone authorised by the State (e.g. a logging company). Given the spiritual attachment of forested communities to their lands and forests,[16] compensation for expropriation of land or damage to land is either not possible or, where it is possible, may never be sufficient. However, this does not mean that it is irrelevant. In fact, no amount of material support can remove the sense of loss of indigenous lands. But what is even worse is the prospect of losing one's land without any such financial compensation at all.[17] And it is significant to note that the loss may arise either as a result of expropriation or where such lands have been assigned for other purposes such as forestry.[18] If that happens, the right to occupy or use, that customary land holders may have, does not include the right to use or exploit the forests on such lands except for domestic subsistence.[19]

Although the harm due to logging activities is not expressly covered by the Forestry Law as a basis for compensation for damage suffered, for the sake of clarity, the following discussion on the tests used to value the different interests in land for compensatory purposes will be focused on the expropriation of land for forestry operations under that Act.

The Value of Expropriated Forest Land

Forest resources are important from different perspectives and for a variety of purposes. Although extremely difficult to gauge, the economic value of the ecosystem services of the world's forests is vast. The importance of forests in the provision of vital ecosystem services is evident from the percentage of the world's population directly or indirectly associated with

[16] For more on the spiritual connections between the Pygmies and their lands and forests, see Survival International, 'The Pygmies' (*Survival International*, 2011) <http://www.survivalinternational.org/tribes/pygmies> accessed 14 September 2011; M Kisliuk, 'Performance and Modernity among BaAka Pygmies: A Closer Look at the Egalitarian Foragers in The Rain Forest' in B Diamond and P Moisala (eds), *Music and Gender* (Univ. of Illinois Press, Urbana 2000) 25-46; N Ohenjo and others, 'Health of Indigenous People in Africa'(2006) 367 The Lancet 1937-46, 1939; S Chakma and M Jensen, *Racism Against Indigenous Peoples* (S Chakma and M Jensen eds, IWGIA, Copenhagen 2001) 312-326. See also, J Sheehan, 'Towards Compensation for the Compulsory Acquisition of Native Title Rights and Interests in Australia' (Paper presented at the FAO/USP/RICS Foundation South Pacific Land Tenure Conflict Symposium, University of the South Pacific, Suva, Fiji 10-12 April 2002) <http://maya.usp.ac.fj/fileadmin/files/faculties/islands/landmgmt/symposium/PAPER53SHEEHAN.PDF>.

[17] See, for example, C O'Faircheallaigh, 'Resource Exploitation and Indigenous People: Towards a General Analytical Framework' in P Jull and S Roberts (eds), *The Challenge of Northern Regions* (North Australia Research Unit, Australian National University, Northern Territory 1991) 244.

[18] Article 17(3) of Ordinance No. 74/1.

[19] Section 8(1) of Law No. 94-1 of 20 January 1994 to lay down Forestry, Wildlife and Fisheries Regulations (hereinafter, the 1994 Forestry Law) defines logging or customary right as '…the right which is recognised as being that of the local population to harvest all forest, wildlife and fisheries products freely for their personal use, except the protected species'.

or dependent upon forests. According to World Bank estimates, more than half a billion people living in extreme poverty depend on forests for some part of their livelihoods.[20] While the forest product industry is a source of economic growth and employment, the international trade in global forest products is nonetheless estimated in the order of US$270 billion, of which products from developing countries account for 20%.[21]

Biologically, World Bank estimates show that forests are home to at least 80% of the world's remaining terrestrial biodiversity and are a major carbon sink that regulates the global climate.[22] Forests are also known to help in maintaining the fertility of the soil, protect watersheds and reduce the risk of natural disasters such as floods and landslides.

Socially, forests are even harder to classify. They may support isolated pockets of traditional life or absorb uprooted people with nowhere else to go. Forests may be refuges for indigenous cultures. They almost never represent the centres of wealth, power, or culture of the modern nation-state, yet people in those centres of power may see forests as having symbolic or moral values absent in the great cities. These are just some of the ecosystem services attached to the various uses of the forest.

Specifically within Cameroon, the more than 20 million hectares (ha) of tropical rainforest[23] acts as a huge carbon sink in the global fight against climate change. In economic terms, the Cameroonian forestry sector is the second largest export revenue source, with timber exports amounting to about 6.5% of the Gross Domestic Product (GDP).[24] The forest is also home to several heterogeneous groups of people including the Pygmy population, who have one of the oldest cultures on earth.[25] The importance of the services provided by the Cameroon forest to poverty reduction is reflected in various policy documents such as the

[20] World Bank, 'Forests and Forestry Sector' (*World Bank*, 2010) <http://go.worldbank.org/VIQE69YFZ0> accessed 22 August 2011.
[21] Ibid.
[22] Ibid.
[23] B Mertens and others, *Interactive Forestry Atlas of Cameroon (version 2.0): An Overview* (A World Resources Institute Report Prepared in Collaboration with the Cameroon Ministry of Forestry and Wildlife Washington, D.C. 2007) 1.
[24] Economist, *Economist Intelligence Unit Country Report Cameroon* (London 2008). Other sources estimate that the Cameroon's forest sector is the second largest export revenue source for the economy, contributing, for example, almost 10% of GDP in 2005, and representing 25% of all export earnings (see VERIFOR, 'Cameroon' (*VERIFOR*, 2007) <http://www.verifor.org/background/case-studies/cameroon.html> accessed 16 September 2011.
[25] See sources cited in P R Oyono, 'From Diversity to Exclusion for Forest Minorities in Cameroon' in C J P Colfer (ed), *The Equitable Forest: Diversity, Community, and Resource Management* (RFF Press, Washington, D.C. 2005) 114-115.

different versions of the Poverty Reduction Strategy Paper (PRSP)[26] under the headings of economic diversification and development of the private sector.

Over the years, the Pygmy population and other forested communities have, through their lifestyle choices and management practices, enhanced the value of these ecosystem services. However, the system of paying compensation is yet to recognise these vital interests in land when the expropriation procedure is triggered.

On the surface, under the 1974 Land Ordinances, compensation for land expropriated does not seem to raise any issue of equity, with regards to what is covered. According to the provisions of Ordinance No. 74/3 of 6 July 1974, expropriation for a public purpose shall confer the right to monetary compensation (Article 7) and such compensation shall be related to the direct, immediate and certain material damage caused by the eviction (Article 8). However, the provisions relating to how compensation is calculated do raise questions of equity. Article 9 of the Ordinance provides that:

> Subject to the provisions of Article 13(2)[27] of the Ordinance to establish rules governing land tenure [i.e. Ordinance No. 74/1], compensation for expropriation shall comprise the following:
>
> - The value of the crops destroyed calculated in accordance with the scale in force;
> - The value of the buildings and other installations calculated by the valuation commission…;
> - The value of the undeveloped land calculated as follows:
>
> a) In the case of urban lands officially allocated subject to payment, compensation may not exceed the official price of public lands in the particular town centre;
>
> b) In the case of lands held by virtue of a normal transaction under ordinary law, compensation shall be the purchase price to which shall be added the ancillary costs of the purchase and of obtaining title;
>
> c) In the case of lands held by virtue of customary tenure under which a land certificate has been issued, compensation may not exceed the amount of the expenses incurred by the issue of the said certificate.

[26] The latest of these reports was prepared by the government of Cameroon in 2009. See IMF, *Cameroon: Poverty Reduction Strategy Paper - Growth and Employment Strategy Paper 2010/2020* (IMF Country Report No 10/257, IMF, Washington, D.C. 2009). This was a follow-up document to a previous one in 2003 and builds on a Vision 2035 (MINEPAT, *Cameroon Vision 2035 - Working Paper* (Yaounde 2009)) policy document prepared earlier by the government. See also IMF, *Cameroon: Poverty Reduction Strategy Paper* (IMF Country Report No 03/249, IMF, Washington, D.C. 2003), esp. 34-54.

[27] Article 13(2) of Ordinance No. 74/1 states that, 'No compensation shall be payable for the destruction of dilapidated buildings liable to collapse, or buildings erected contrary to town planning regulations'.

From the above provisions, it is clear that expropriation of land provides for the payment of compensation for the land acquired itself. However, where there is no improvement on the acquired land, as defined under the Ordinance (i.e., no valued crops, no worthy buildings and other installations), no compensation is payable. For undeveloped land, compensation can only be paid to the value of the purchase price of the land if it has ever been bought or sold or for the cost of obtaining a land certificate for land that is held under customary law. As argued earlier, this provision excludes the vast majority of citizens without a land certificate, but with a legal right to compensation.

In addition, even when there is a right to compensation, the valuation test used does not take account of the real value of the land to the customary owners and others. Instead the law takes account of only a very narrow set of market values attributed to only a few of those affected, missing the value of land as providing livelihoods to others and benefits to the community as a whole. In most of the forested areas of Cameroon, the land is undeveloped and there are no structures on them, hence no compensation can be paid to the villagers if such land is acquired.[28] Yet expropriation may remove their rights to hunt, to gather fruits, farm or even practice their culture; things which they rely on for their livelihood.[29]

With regards to the 1994 Forestry Law, compensation for the expropriation of forested land is not expressly mentioned. This is due to, what appears to be, the unwritten objective of the law - to nationalise all forests except non-permanent forests.[30] Its effect is to place title to all forests and forest lands in the State. There is therefore, no need to initiate the expropriation procedure prior to designating the forests as permanent forest estates (State or council forests).[31] Although, in theory, they are categorised as 'non-State' forests, non-permanent forests can be expropriated and classified as State or council forests, which the State then controls and manages in the 'public interest'.[32] For example, if a forest that was initially classified under the non-permanent forest domain is later considered to fulfill most of the characteristics of a permanent forest, the expropriation process is triggered and the forest reclassified. Nevertheless, the procedure allows for the payment of compensation under the

[28] T Greiber and S Schiele (eds), *Governance of Ecosystem Services: Lessons Learned from Cameroon, China, Costa Rica, and Ecuador* (IUCN, Gland, Switzerland 2011), 27-28.
[29] Rights may be limited as a result of the forest being reclassified, but in extreme cases expropriation can lead to the complete loss of the land and all associated rights.
[30] With the exception of private forests, communal and community forests are still part of the national forests. However, community forests are allowed to be managed, preserved and exploited by the approved community in its own interest and subject to an approved management plan. See Sections 37 and 38 of the 1994 Forestry Law.
[31] Section 20(2) of the 1994 Forestry Law provides that, 'Permanent forest shall comprise lands that are used solely for forestry and/or as a wildlife habitat'.
[32] Article 19(2) of Decree No. 95-531-PM of 23 August 1995 to determine the conditions of implementation of the forestry regulations (hereinafter, the Degree of Implementation).

rules defined by the Ordinance No. 74/3 as explained above. Specifically, Section 26 of the 1994 Forestry Law provides that:

> (1) The instrument classifying State forest shall take into account the social environment of the local population, who shall maintain their *logging rights.*
> (2) However, such rights may be limited if they are contrary to the purpose of the forest. In such case, the local population shall be entitled to compensation according to the conditions laid down by decree.
> (3) Public access to State forests may be regulated or forbidden.

Section 27 further states that 'A forest may be classified only after compensating persons who had carried out investments therein before the start of the administrative classification procedure'.

The above provisions again reveal that any payment of compensation is not for the true value of the expropriated land, but only for the very narrow set of interests and values attributed to the local population and others, including their *logging rights*.

The focus of the current law on economic improvements as the basis for paying compensation could be traced to the time when the 1974 Land Ordinances were promulgated. At the time, the debate on land reform was driven mainly by economic objectives, especially in the agricultural sector, rather than environmental and social ones.[33] However, as environmental issues have increasingly become part of the national debate the same laws are still being used to justify the non-payment of compensation for the expropriation of land for economic and even environmental programmes. This is the case when land is set aside for forestry purposes as defined by the Forestry Law even though its main aim is to ensure the sustainable conservation and use of the forestry resources and of the various ecosystems within the framework of an integrated management approach.[34] In so doing the true value of the land in providing vital ecosystem services and the role of the local population in sustaining these services is being ignored.

But what does the real value of land involve? The next section considers the grounds on which ecosystem services add to the value of land. Obviously, there are difficulties on how to

[33] See, for example, S Melone, *La Parenté et la Terre dans la Stratégie du Développement, l'Expérience Camerounaise: etude critique* (Klincksieck Paris 1972) 184 and A D Tjouen, *Droits domaniaux et techniques foncières en droit camerounais: (étude d'une réforme législative)* (Economica, Paris 1982) 37.
[34] Section 1 of the 1994 Forestry Law.

value such services, and these difficulties have been well documented.[35] The subject of the analysis here is not to focus on these difficulties, but rather on the need to consider such an approach in calculating compensation for land expropriated, especially when it concerns customary landowners who have contributed in enhancing these ecosystem services, but who have not necessarily made improvements to the land that fit with the narrow set of "improvements" that the current law requires.

The Concept of Ecosystem Services and the Value of Land

The concept of ecosystem services has emerged in the literature and in practice elsewhere in the world as one way of valuing land,[36] whether that be for the purpose of compensating landowners and land managers, or for other reasons. The contribution that ecosystem services make to the overall value of land is now recognised to the extent that in the United States, for example, it has even been suggested that property owners with ecosystem services on their land should have the land purchased by the government.[37] At the moment though, the discussion is mainly focused on payment for ecosystem services as a mechanism whereby a source of income is provided to those who, by managing land in a particular way – for example, maintaining it in a "natural" state rather than felling forests, building houses or converting land to intensive agriculture – are providing benefits for the public or specific beneficiaries.[38] However, if the benefits are of such public interest that the State may decide to initiate the expropriation procedure in order to better protect them, then the valuation tests used must take into account the value of maintaining land in its "natural" state. This requires moving away from the very narrow and artificially created set of "commercial" interests and values used in the Cameroonian system to recognising the true value of land even in its "natural" state as providing livelihoods to others and benefits (economic, social, and ecological) to the community as a whole.

[35] See, for example, K H Redford and W M Adams, 'Payment for Ecosystem Services and the Challenge of Saving Nature'(2009) 23 Conservation Biology 785-87; C T Reid, 'Between Priceless and Worthless: Challenges in Using Market Mechanisms for Conserving Biodiversity' Transnational Environmental Law, available on CJO 2012 doi:10.1017/S2047102512000210 (hard copy in press); D Helm and C Hepburn, 'The Economic Analysis of Biodiversity: An Assessment'(2012) 28 Oxford Review of Economic Policy 1-21.

[36] See, for example, A I Davis, 'Ecosystem Services and the Value of Land'(2010) 20 Duke Envtl L & Pol'y F 339-84.

[37] J Salzman, 'Creating Markets for Ecosystem Services: Notes from the Field'(2005) 80 NYU L REV 870-961, 937.

[38] For an overview see, Forest Trends and Katoomba Group, *Payments for Ecosystem Services - Getting Started: A Primer* (Forest Trends, The Katoomba Group, & UNEP, Washington, D.C. 2008) <http://www.unep.org/pdf/PaymentsForEcosystemServices_en.pdf>.

Four broad categories of ecosystem services are recognised at the international level. These include: provisioning services such as food, timber, fresh water and plant-derived medicines; regulating services such as those that affect water quality through the filtration of pollutants by wetlands, climate regulation through carbon storage and water cycling, and protection from disasters and disease; cultural services that provide recreation, spiritual and aesthetic values, education; and supporting services such as soil formation, photosynthesis and nutrient cycling.[39] Studies[40] identify the great economic and spiritual value of the natural environment to society and the 'more holistic approach'[41] to the management of land that is now being encouraged through international law requires a shift in both the mind-set and practices of many of those who manage and use land. Besides the general acceptance of the need to shift our policy and practices to reflect the value of land in providing ecosystem services, a starting point is to calculate in economic terms the value of such services and to ensure that this is properly taken into account when decisions on land use are being taken.

There are challenges with valuing ecosystem services. While ecosystem services such as producing food, timber and energy have an explicit economic value reflected in the market price of the goods produced, other ecosystem services such as the protection or provision of biodiversity, valued by society cannot readily be priced.[42] The difficulty of valuing ecosystem services means that the rate of payments for the provision of ecosystem services under most Payment for Ecosystem Services (PES) schemes are not calculated based on the value of the services. They are valued in comparison to the land area or income forgone by adopting specified land management practices. Nonetheless, the approach adopted and the payment rates demonstrate the extent to which ecosystems services are seen as adding value to land.

Under the US Conservation Reserve Program (CRP), for example, payments are provided to farmers for planting long-term, resource-conserving covers on eligible farmland to improve

[39] The Economics of Ecosystems and Biodiversity (TEEB), *The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB* (2010) 7, and Annex 2 and the sources referred to there. See generally the website of the TEEB project <http://teebweb.org> and United Nations, 'Millennium Ecosystem Assessment' (2005) (available at http://www.unep.org/maweb/en/index.aspx).

[40] See, for example, Defra, *Securing a Healthy Natural Environment: An Action Plan for Embedding an Ecosystems Approach* (Defra, London 2007), 7; UK National Ecosystem Assessment, *The UK National Ecosystem Assessment: Synthesis of the Key Findings* (UNEP-WCMC, Cambridge 2011); and HM Government, *The Natural Choice: Securing the Value of Nature* (CM 8082, The Stationery Office, London June 2011).

[41] Convention on Biological Diversity, COP 5 (2000) Decision V/6 Ecosystem Approach, para 6, Principle 5.

[42] C T Reid, 'Between Priceless and Worthless: Challenges in Using Market Mechanisms for Conserving Biodiversity' Transnational Environmental Law, available on CJO 2012 doi:10.1017/S2047102512000210.

the quality of water, control soil erosion, and develop wildlife habitat.[43] Although payment rates are based on the relative productivity of the soils within each county and the average dry land cash rent or cash rent equivalent, determining the amount to pay is still largely dependent on the area of land to be placed under the scheme. Yet, lands that offer greater environmental benefits calculated according to the Environmental Benefits Index (EBI)[44] and for which landowners are willing to accept the maximum productivity adjusted payments, are automatically accepted into the scheme. The rates per acre paid for such lands are also significantly higher than those for land without such environmental benefits. Although the scheme has its weaknesses,[45] there has also been progress in creating habitat for different species of wildlife.[46] The higher rental rates for land with greater environmental benefits reflect the increased flow of ecosystem services and their value, as well as the opportunity cost to the producer of placing this land in the program.[47] Therefore, if land placed under the CRP, for example, is the subject of a market transaction, its market value is likely to reflect the potential of higher rental rates for the land as a result of the ecosystem services it produces.

If ecosystem valuation were included in the calculation of compensation for expropriation or land-damage in Cameroon it would have a significant benefit for those with a customary interest in undeveloped land. It would particularly benefit those where traditional market value approaches have failed to come up with any reasonable amount of compensation. And

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[43] See the website of the Conservation Reserve Program (CRP) <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=crp> accessed 14 February 2013. For an overview of the history and development of the CRP, see Chapter 9 of J B Ruhl, S E Kraft and C L Lant, *Law and Policy of Ecosystem Services* (Island Press, Washington, DC 2007) 186-192.

[44] For more in the index see, Farm Services Agency (FSA), 'Fact Sheet: Conservation Reserve Program Sign-Up 43 Environmental Benefits Index (EBI)' (2012) <http://www.fsa.usda.gov/Internet/FSA_File/gs43ebi.pdf> accessed 14 February 2013; Farm Services Agency (FSA), 'Conservation Reserve Program Sign-up 41 Environmental Benefits Index (EBI)' (2011) <http://www.fsa.usda.gov/Internet/FSA_File/crp_41_ebi.pdf> accessed 14 February 2013; and Farm Services Agency (FSA), 'Conservation Reserve Program General Sign-up 33 Environmental Benefi ts Index' (2006) <http://www.fsa.usda.gov/Internet/FSA_File/crp33ebi06.pdf> accessed 14 February 2013. See further Ruhl *et al* (n 43) 190-191.

[45] For example, issues have been identified with the design structure, land eligibility criteria, and the pressure to qualify for the program that all contribute to decrease the chances of significant ecosystem service provision. See J Salzman, 'Creating Markets for Ecosystem Services: Notes from the Field'(2005) 80 NYU L REV 870-961, 892-894.

[46] Farm Services Agency (FSA), 'News Release: Conservation Minded' <http://www.fsa.usda.gov/FSA/printapp?fileName=ss_ia_artid_617.html&newsType=crpsuccessstories> accessed 14 February 2013. For the reported State-by-State benefits of the CRP, see Farm Services Agency (FSA), 'Conservation Success Stories' <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=crp-20> accessed 14 February 2013.

[47] Ruhl *et al* (n 43) 190-191.

there are precedents for this approach being used in other countries. Specifically, the United States Court of Claims has held that, with regards to aboriginal interest:

> This method of valuation takes into consideration whatever sales of neighboring lands are of record. It considers the natural resources of the land ceded, including its climate, vegetation, including timber, game and wildlife, mineral resources and whether they are of economic value at the time of cession, or merely of potential value, water power, its then or potential use, markets and transportation - considering the ready market at that time and the potential market.[48]

Thus, in the determination of the "market value" of the land subject to "recognised" aboriginal interests, numerous factors need to be taken into account by the courts which go beyond a simple assessment of the economic value of the aboriginal activities carried out on the land. The fair value of the land is to be ascertained taking into account all pertinent factors including the timber, game, wildlife and agricultural potential of the land. Although, not expressly stated by the court, fair market valuations that consider these factors are actually ecosystem services valuations. The recognised aboriginal interests in the USA and the customary interests in Cameroon have much in common, and this decision points to the fact that the Cameroonian system of land valuation may need reform.

The suggestion that the Cameroonian system may need reform is further underlined by experience in South Africa where under the Constitution, specific factors must be taken into account when different interests are balanced, including what the market value is.[49] The interests of those affected are classified under the following heads:

(a) current use of the property;
(b) the history of the acquisition and use of the property;
(c) market value of the property;
(d) the extent of direct state investment and subsidy in the acquisition and beneficial capital improvement of the property; and
(e) purpose of expropriation.[50]

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[48] *Otoe and Missouria Tribe of Indians v United States*, 131 Ct.Cl. 593, 131 F. Supp. 265 (CT. CI., 1955) [290].
[49] Section 25(3) of the Constitution of the Republic of South Africa Act No. 108 of 1996.
[50] N S Terblanche, 'The Challenges to Valuers with Regard to Compensation for Expropriation and Restitution in South African Statutes' (PRRES Tenth Annual Conference, Bangkok, Thailand, Sunday 25th To Wednesday 28th January 2004), 19-21 (available at http://www.prres.net/Papers/Terblanche_Compensation_Expropriation_Restitution_South_African_Statutes.pdf).

Under these different heads, public interest is classified to include the nation's commitment to land reform and to reforms to bring about equitable access to all South Africa's natural resources.[51] Market value is thus one of the factors to be considered, rather than the prime factor. This approach to the calculation of compensation is in line with other jurisdictions, for example Germany, Sweden, the United Kingdom, Ireland, Australia, Japan[52] and Canada.[53] By this approach, the interests of the landowners may increase the compensation to above market value but this may be balanced by the fact that the public interest may reduce the compensation to an amount less than market value. Just and equitable compensation is therefore the sum total of the value of the interest of those affected by expropriation, minus the value of the public's interest. Although the list of interests given in the South African example, does not expressly include ecosystem services as interests that must be valued, it was not intended to be a closed list of interests and unconventional property interests (including those that require protection under international law) other than those listed in the Section 25(3) of the Constitution may also be considered.[54]

The South African approach suggests that "just and equitable" compensation involves a balancing of interests; a view supported by the European Court of Human Rights. Although the European Convention on Human Rights states that 'Article 1 of Protocol 1 to the European Convention on Human Rights does not expressly require compensation for expropriation,' the European Court of Human Rights has nonetheless held that:

> [T]he taking of property without payment of an amount 'reasonably related to its value' would normally constitute a disproportionate interference with property rights, which could not be considered justifiable under Article 1 [of the European Convention on Human Rights]. However, Article 1 'does not guarantee a right to full compensation in all circumstances.' Legitimate objectives of 'public interest', such as pursued in measures of economic reform or measures designed to achieve greater social justice, may call for less than reimbursement of the full economic value.[55]

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[51] Section 25(4) of the Constitution of the Republic of South Africa.
[52] See, for example, D L C Miller and A Pope, *Land Title in South Africa* (Juta & Co., Cape Town 2000) 302.
[53] A F Hacault, 'A Primer on Expropriation: Are You Missing Elements of Compensation?' (Prepared for the Annual Conference of the Appraisal Institute of Canada, Mont-Tremblant, Quebec, May 27 - May 30, 2009) 5-14 < http://www.tdslaw.com/media/files/articleexpropriationafh2.pdf>.
[54] *Ex parte Chairperson of the Constitutional Assembly: In re Certification of the Constitution of the Republic of South Africa, 1996* 1996 (4) SA 744 (CC), 43-49. See further, D Kleyn, 'The Constitutional Protection of Property: A Comparison Between the German and the South African Approach'(1996) 11 SA Public Law 402-45.
[55] G Budlender, J Latsky J and T Roux, *Juta's New Land Law* (Juta & Co., Cape Town 1998) 1-57 & 1-65 cited in N S Terblanche (n 50) 21.

Again, this stresses the need for the compensation and the time and manner of payment to reflect an equitable balance between the public interest and the interests of those affected.

From the above examples, there appears to be greater recognition that the expropriation law "market value at the time of taking" approach is inappropriate to adequately compensate for the infringement of the customary interests in land. Even so, there seems to be a need to also consider the potential future value of the land. Therefore, an approach that takes into account the ecosystem services present and future value of the land is of particular importance. In Cameroon's case this is particularly relevant in cases where land subject to customary title or necessary for the exercise of customary rights is expropriated. As indicated earlier, by their very nature, many customary and indigenous rights to occupation or use, for example subsistence farming, logging and hunting require land sufficient to ensure their proper exercise. The expropriation of the land for other purposes or the limitation on the exercise of the right, in extreme cases, can lead to the demise of the customary activity that the right intends to protect. Such infringements affect in many cases, not only those local communities exercising the right at the time the infringements are first carried out, but also all future generations of the customary communities who could have benefited from the exercise of the right. The *sui generis* character of customary ownership rights generally, and particularly the collective, cultural and historic nature of these rights, strongly suggest that the loss of the exercise of the right and the lost land be compensated not only in present value terms but also in terms which take into account the loss of the future uses of the land and the consequential long term impacts on the affected local society. This is an idea that finds support in the concept of sustainable development: a concept from which the ecosystem approach has evolved.

Conclusion

An ecosystem services approach involves making sure that the benefits provided by the environment are recognised and sustained whilst delivering other economic and social goals.[56] There are different ways of achieving this objective.[57] Meeting this objective might be simplest if most lands providing ecosystem services were public property that could be set aside for forestry or other public use, but they are not. Although the existing land tenure system in Cameroon has sought to abolish customary ownership by "nationalising" all lands

[56] Convention on Biological Diversity, COP 5 (2000) Decision V/6 Ecosystem Approach.
[57] See, for example, The Scottish Government, *Applying an Ecosystems Approach to Land Use: Information Note* (The Scottish Government, Edinburgh 2011) 2 < http://www.scotland.gov.uk/Resource/Doc/345453/0114927.pdf>.

occupied or used customarily and for which a land certificate has not been issued, the reality is that customary ownership remains one of the main facets of the Cameroon land tenure system. Whether or not such customary ownership titles are recognised by the expropriation law, private lands (which will include lands held customarily in Cameroon) are vital for the provision of most services including biodiversity conservation.[58] The placement of certain forest land under a management agreement indicates recognition of this fact, but the expropriation law fails to recognise all these vital interests and values in the land. For example, without expropriation, where customary individuals or communities are able to control access to a region – as might be the case with sacred forests – it may be possible for them to successfully recoup conservation costs by charging tourists to visit the area and view the native flora and fauna as well as witness some cultural practices. It follows that whether the subject of a purchase or an expropriation proceeding, the value of the land should not be based only on the houses built and crops found on the land or the cost of obtaining a land certificate, as is currently the case, but should also take into account the benefits to the public and specific beneficiaries present and future of maintaining the land in its "natural" state. Although this can go a long way to resolving some of the fundamental issues of equity in the system of paying compensation as a result of the expropriation of land especially for conservation purposes in Cameroon, there are obvious problems with an ecosystem services approach.[59] The most important in this case would be how to value the present and future ecosystem services and any improvements to them made by the customary owners and occupiers over the years.

This article has drawn examples from the compensation valuation approaches in the United States, South Africa and other countries which generated some useful lessons on how compensation may be calculated taking account of ecosystem services. However, it is not in any way suggested that the approach is going to automatically work for Cameroon, particularly due to the differences in political and legal contexts. While further research is needed to find solutions to the problems with this approach, the core principle of the ecosystem services approach provides a significant way in which some of the equity issues in the payment of compensation for the expropriation of land in Cameroon could be addressed. For this to work, however, it will require both that the valuation system used to calculate compensation payable to owners take account of the value of ecosystem services and that customary ownership is recognised for the purposes of providing compensation.

[58] D Farrier, 'Conserving Biodiversity on Private Land: Incentives for Management or Compensation for Lost Expectations?'(1995) 19 Harvard Environmental Law Review 303-408, 310.
[59] K H Redford and W M Adams, 'Payment for Ecosystem Services and the Challenge of Saving Nature'(2009) 23 Conservation Biology 785-87.

These changes must be incorporated in tandem given the key role played by customary land owners in the provision and maintenance of ecosystem services in Cameroon.