

CONFLICT AND POST-CONFLICT CONTEXTS IN RELATION TO LAND, OTHER RESOURCES AND LAND ADMINISTRATION

**Dimo TODOROVSKI¹, Jaap ZEVENBERGEN² and
Paul VAN DER MOLEN³**

SUMMARY

Conflict and land are tied in a complex relation. This relation has various characteristics before, during the armed conflict, and in post-conflict contexts. Land and other resources are many times seen as factors for eruption of violent conflicts, in some circumstances influence the duration and give specific characteristics to the conflict. Land issues play a particular role in the post-conflict contexts. Land was identified as a critical gap in international response capacities and the awareness about the vital importance of addressing the housing, land and property issues within the context of post-conflict state building has increased. This paper, based on literature review, explores the conflicts and post-conflict contexts in relation to land, other resources and land administration. At the end, this paper acknowledges the importance of land and its administration in post-conflict contexts as one of the essential elements in the process of post-conflict state building.

Key words: Conflict, post-conflict contexts, land, natural resources, land administration, post-conflict land administration.

1 INTRODUCTION

Causes of violent conflicts are many and varied; in some cases land is a major cause. Land was identified as a critical gap in international response capacities (OCHA, 2005). Awareness about the importance of addressing the

¹ **Dimo TODOROVSKI, PhD Candidate**, d.todorovski@utwente.nl
University of Twente, Faculty ITC, Department Urban and Regional Planning and Geo-Information Management, www.itc.nl, Tel. +31 53 487 4444;
Address: Hengelosestraat 99, 7514 AE, Enschede, the Netherlands

² **Univ. Prof. Jaap ZEVENBERGEN**, j.a.zevenbergen@utwente.nl
University of Twente, Faculty ITC, Department Urban and Regional Planning and Geo-Information Management, www.itc.nl, Tel. +31 53 487 4444;
Address: Hengelosestraat 99, 7514 AE, Enschede, the Netherlands

³ **Univ. Prof. Paul VAN DER MOLEN**, p.vandermolen-2@utwente.nl
University of Twente, Faculty ITC, Department Urban and Regional Planning and Geo-Information Management, www.itc.nl, Tel. +31 53 487 4444;
Address: Hengelosestraat 99, 7514 AE, Enschede, the Netherlands

housing, land and property (HLP) issues in the emergency and early recovery period has increased in the last 15 years. On the other hand, experiences show that there are only a few cases where land issues were appropriately addressed in the post-conflict contexts. Humanitarian organizations in this period mainly focused on internally displaced persons (IDPs), refugees and restoring the situation as it was before the conflict.

There is increasing number of literature about the topic of land issues in post-conflict context, basically on: what to do about land, land management and land administration in post-conflict contexts (EU-UN, 2012; FAO, 2005; Pantuliano, 2009; UN-HABITAT, 2007, 2009). Although the awareness about the importance of land and other resources in post-conflict contexts has increased within the international community, actors involved with the topic are underlining the need that more in depth research in this specific area is required which should be evidence based.

Recognizing the important role that land is playing within the conflict and post-conflict contexts goes in the alignment of the goal of this research paper: to increase the understanding about the conflict and post-conflict contexts in relation to land, other resources and land administration.

The paper starts with identifying the role of land in conflicts and post-conflict contexts. It continues with exploring, other resources and land administration in conflict and post-conflict contexts. It ends with conclusions about the conflict and post conflict contexts in relation to land, and about the potential that land administration has for post-conflict contexts.

2 LAND IN CONFLICT AND POST-CONFLICT CONTEXTS

As described in UN/ECE (2005) land can be recognized as a source of all wealth. Land is a place of all shelter, in the city, the town, the village, and at home. It is the source of food, of materials for construction and manufacture, of coal, gas and oil, of springs and rivers and other essentials for life. Indestructible, immovable, it is the foundation of all human activities. Houses and factories, forests and farms, river roads and railways, mines, quarries, and reservoirs are all fashioned from the land. It offers endless opportunities for development and discovery. From land administration perspective 'Land' is to be considered as the surface of the earth, the materials beneath, the air above, and all things fixed to the soil, so it is more than just 'land' alone: it includes buildings, etc. (van der Molen, 2002). 'Recognizing that land is a source of wealth lies at the heart of good government and effective public administration' (UN/ECE, 2005).

Historically observing, wars were fought over land. In some cases land was one of the factors and sometimes land was a major cause for the conflict.

Therefore, Putzel (2009) argue that causes of conflicts are not because of the land only, but they always have a land dimension. Land is often a significant factor for widespread violence and also a critical element in peace-building and reconstruction in post-conflict situations (USAID, 2005).

The most serious concerns from the armed conflicts are: people killed, destroyed infrastructure and houses and displaced population. Where, displacement is becoming an alarming issue for the states in conflict, neighbouring states, UN and international community (Hollingsworth, 2014; Takeuchi et al., 2014). During the conflict people experience forced eviction. Displaced people often settle on land to which they have no legal claim. There is also an issue that remaining citizens occupy land and houses left by refugees/IDPs, this type of occupation is called secondary occupation. There is an important legal distinction between refugees and IDPs. Refugees are people who flee their homes for the safety of another country. IDPs are people who flee from violence but remain within their own country (FAO, 2005). The right of all refugees and IDPs to return to their homes and places of habitual residence in their country and/or place of origin is defined in relevant international legal instruments (UN, 1998). The period after the end of a conflict is critical because of the possibility of return of displaced population in large numbers and in short time period, here, the land-related challenges arouses on horizon and a possibility for renewed violent conflict (UN, 1999).

Armed conflicts usually end with signing a peace agreement described as: ‘a formal agreement between warring parties, which addresses disputed incompatibility, either by settling all or part of it, or by clearly outlining a process for how the warring parties plan to regulate the incompatibility’ (UU-DPCR, 2012). Experiences show that land issues are not always included in the peace agreements. De Wit in the HPG (2008) underlines that there is a need to ensure land issues are tackled in peace agreements and that this includes adequate follow-up; making references to land can be important (even in fragile contexts) as it puts pressure for the issue not to be dropped off the political agenda.

The role of land and other resources, natural resources for example, in conflict and post-conflict period is attracting international attention. Land and natural resources often contribute to conflict and are affected by conflict (J. Unruh and Williams, 2013). The changing nature of violent conflict combined with long-term demographic, economic and environmental trends present significant practical challenges for global peace and security (EU-UN, 2012). In the following sections first natural and other resources are observed in regards of their impact on the eruption of conflicts, during the conflict and their role in the post-conflict period. Then, land-related issues,

more specifically land administration in the conflict and post-conflict contexts are explored more in depth.

3 NATURAL AND OTHER RESOURCES IN CONFLICT AND POST-CONFLICT CONTEXTS

Since the late 1990s, many scholars have studied the relationship between natural resource wealth and conflicts. Most have been motivated by a series of high-profile conflicts – cases like Angola, Colombia, the Democratic Republic of Congo, Liberia, Sierra Leone, and Sudan – that have captured the attention of both international organizations and the media. These studies tell us about the relationship between natural resources – including oil, gas, non-fuel minerals, gemstones, narcotics, timber, and agricultural products – and violent conflict (Ross, 2004).

Resources not only financed, but in some cases motivated conflicts, and shaped strategies of power based on the commercialization of armed conflict and the territory of sovereignty around valuable resource areas and trading networks. Natural resources have played a conspicuous role in the history of armed conflicts (Le Billon, 2001). From competition over wild game to merchant capital and imperialist wars over precious minerals, natural resources have motivated or financed the violent activities of many different types of belligerents (Westing, 1986).

Armed conflicts and natural resources can be directly related in two main ways: armed conflicts motivated by the control of resources, and resources integrated into the financing of armed conflicts. Although few wars are initially motivated by conflict over the control of resources, many integrate resources into their political economy. Beyond motivating or financing conflicts, the level of dependence, conflictuality, and lootability of a resource can also increase the vulnerability of societies and the risk of armed conflict (Le Billon, 2001).

Several case studies from African (and Central Asian) civil wars have shown the complex political economy of resource exploitation, armed struggle and oligopolistic regimes of resource exploitation, especially when high-value resources such as oil or diamonds are available (Korf and Funfgeld, 2006).

Ross (2004) analysed the following five resource-conflict relationship:

- whether or not natural resources influence the onset of conflict;
- whether or not resources influence the duration of conflict;
- whether resources influence all types of civil wars or only a subtype, e.g. ethnic or separatist conflicts;
- whether all types of resources, or only a subset (e.g. oil, diamonds) are linked to conflict; and

- what causal mechanisms link resources to conflict.

He was using the results from the research collected in the period of five years; the weight of the evidence available so far suggests four regularities:

(1) oil dependence appears to be linked to the initiation of conflict, but not conflict duration, there is some evidence that oil dependence (and possibly mineral dependence) is more strongly associated with separatist conflicts than other types of conflicts;

(2) gemstones, opium, coca, and cannabis do not seem to be linked to the initiation of conflict, but they do seem to lengthen pre-existing wars, timber's role remains untested;

(3) there is no statistical evidence – and very little case study evidence – that links agricultural commodities to either the initiation or the duration of civil war;

(4) the claim that primary commodities are associated with the onset of civil war does not appear to be robust.

Ross (2004) argues that research on resources and conflict has developed remarkably fast; almost all of the studies described here have been carried out since the 1998 publication of Collier & Hoeffler's seminal article. (Collier and Heoffler, 1998) investigated whether conflicts have economic cause in a utility model with four variables: initial income, ethno-linguistic fractionalisation, the amount of natural resources, and initial population size. Recommendation from Ross (2004) at the end is that if scholars wish to produce research that contributes to better policies, they must think carefully about testing their ideas; sharing data; speaking a common conceptual language; and drawing together the findings of disparate research projects – both qualitative and quantitative.

Recent studies have shown that conflicts associated with natural resources are twice as likely to relapse into conflict within first five years after the end of hostilities (UNEP, 2009).

As a summary, natural resources can have influence as a cause of conflict, to the duration of the conflict, they play specific role in the post-conflict period. If adequately managed, they could contribute to the post-conflict economic development of the particular state and to the overall post-conflict state building.

3.1 Resources scarcity as a risk factor for possible violence/conflict

According to advocates of the *scarce resource wars* hypothesis, people or nations will fight each other to secure access to the resources necessary for their survival: the more scarce the resource, the more bitter the fight (Homer-Dixon, 1999; Peluso and Watts, 2001).

The link between scarce resources and conflict is contested in general (de Soysa, 2002). Several scholars argue that scarce resources should be more relevant in generating smaller more local conflicts than civil or intrastate wars (Barnett, 2001). The researchers in this field developed Malthusian concept or frame by linking resource scarcity with violence (Korf and Funfgeld, 2006).

In the literature on the nexus of resources and violent conflict, two broad lines of thinking can be distinguished. Both have in common that they essentialise a kind of resource curse. The first one works in a neo-Malthusian conception that links population growth with increasing resource scarcity and related environmental problems, which translates into triggers for violent conflict (Homer-Dixon, 1999). The second school of thought links violent conflict with resource abundance rather than scarcity. This argument stresses the opportunities to monopolize resource rents through violence in 'greed'-driven warfare (Collier, 2000).

3.2 Effects of 'Climate Change' and conflicts

The phenomenon of climate change has been researched with focus on how it could be related with violent conflicts. The evidence of coming climate change has generated catastrophe-like statements of a future where a warmer, wetter, and wilder climate leads to a surge in migrant streams and gives rise to new wars (Theisen, 2012).

Statements like: 'the threat from climate change is serious, it is urgent, and it is growing. More frequent drought and crop failures breed hunger and conflict are expected' (Obama, 2009) but also many scholars (e.g. de Soysa, 2002; Peluso and Watts, 2001) with their arguments posit a clear link between resource scarcity and conflict. From the climate change expected effects could be draughts, floods and more nature caused disasters.

Research in this area proved that climatic factors do influence the risk of conflicts and violent events. Research performed by Theisen (2012) comes to findings which indicate that relatively dry years tend to have a peaceful effect on the following year. Little support is found for the notion that scarcity of farmland fuels violence in itself or in election years, but an election by itself increases risk. More densely populated areas run a higher risk of conflict, but this is not due to pressure on cropland; rather, it is likely to be driven by other mechanisms that put densely populated areas at risk. Taking a longer-term perspective, (Witsenburg and Adano, 2009) analyse the Marsabit district in Kenya and find that wetter years see on average more than twice as many killed than do drier years.

Theisen's summary of the result from his research are as following: climatic factors do influence the risk of conflict and conflict events, quite strong

evidence for years following wetter years being less safe than drier years, the thesis that land scarcity breeds violence in itself and in election years receives little support, although population density per se is found to increase conflict risk. Other conflict influence factors: political marginalization (spill over of civil conflicts, or hideouts for criminal elements) and ethnics manipulation (Theisen, 2012).

3.3 Other issues in relation with conflicts and post-conflict contexts

An issue of Journal of Agrarian Change on violence and war seeks to bring agrarian relations back into the analytics of armed conflict (Cramer and Richards, 2011). This is important as it grounds war in structural and material interests, and makes it less of a capricious, anarchist, ‘cultural’ phenomenon (Le Billon, 2001; Peluso and Watts, 2001).

Agrarian history has led to expect violence in land reform struggles and over the unnatural division of tropical landscapes into discrete agriculture and forest zones; these are taking new forms with changes in forest cover, agricultural production and practice, and the land control dimensions of forestry, agro-forestry, and agriculture (Peluso and Lund, 2011).

Political ecology is the study of the relationships between political, economic and social factors with environmental issues and changes. Political ecology has rarely examined the relationship between the environment and a core concern of traditional political science, namely regime security and armed conflict, focusing on social conflicts over forest resources, protected areas, agricultural regimes, or productive regions; yet neglecting large-scale violent conflicts (Le Billon, 2001).

The point in a summary is that resources are key to the ‘sustainability’ of violent conflicts (Daudelin, 2003).

3.4 Land-related issues in conflict and post-conflict contexts

During the conflict people are killed, infrastructure and houses are destroyed and masses of people are being displaced. Destruction and displacement have big influence on land and property related issues during and specifically in aftermath of the conflict (Hollingsworth, 2014).

One of the immediate and frequent land-related problems in post-conflict contexts, leading to confusion in regard of variety of legal and administrative issues is legal ambiguity. Where, usually the following situations are present: unclear rights of access and use land and properties, confusion about which institutions govern land, disputes related to individual ownership and land, and overlapping, incomplete inconsistent and outdated land policies (J. Unruh and Williams, 2013).

Legal pluralism is another feature of post-conflict contexts, here, different types of laws regulating ownership or rights to use land and property (including *ad hoc*, customary, religious, and statutory - often localized) coexist and function in parallel. Governmental capacities and structure are often weak and fragmented, in regard of which ministry or authority has mandate to enforce higher mentioned laws. Establishing (or re-establishing) tenure security can be very complicated in countries emerging from years of conflict, especially where land records are not available or are badly organized, and where statutory and customary systems overlap (Fitzpatrick, 2008).

A small number of professionals with background in land and property related issues are engaged in the topic of conflict, and are especially needed in post-conflict contexts. This specific environment requires engagement of different actors to come and work together in the early stages of the post-conflict period. Pantuliano in HPG (2008), underlining the critical importance that land issues play in conflict and post-conflict contexts, stresses the identified need to bring land tenure expertise to the humanitarian community (HPG, 2008).

At the end of conflict, masses of displaced population returns back to their places of origin. With their return, a host of land-related problems arise on the horizon and returning population usually face: illegal occupation of their properties by local commanders, disputes arising from the loss and destruction of ownership documents, fraudulent transactions, land distribution by successive governments to their political supporters, and disputes over grazing and water rights (Guterras, 2009).

Disputes over land are often an underlying cause of, and factor in, conflict, especially in protracted crises. Land dispute resolution mechanisms are viewed as a conditional tool for a good peace process as well (J. Unruh, 2001). It is important that land claims and grievances be addressed promptly at the end of a conflict. If these issues are overlooked, property disputes will inevitably escalate and may risk threatening the usually fragile stability of a post-conflict transition. The increase in land and property disputes in the post-conflict period usually stems from the failure to understand or constructively manage post-conflict land and property relations. This has important implications for return, recovery and reintegration processes (Pantuliano, 2009).

Daudelin (2003) developed an analytical framework that would help assess the correlation of land policies and conflict's. The framework addresses issues regarding the: access to land, security of tenure and distribution of land which are addressed within the particular land policy of one state. Conclusion from this research is that 'land policy can make things worse or better but it is only exceptionally a critical factor of conflict, even in the

countries and societies where the vast majority of the population depends on agriculture for its survival, and even countries coming out of war’.

Despite increasing evidence that land is often a critical issue in conflict-affected emergencies and forced displacement and plays a key role in post-conflict reintegration and reconstruction processes, there is a perceived lack of humanitarian engagement on HLP issues. Emergency measures such as creation of IDP camps and other settlements are de facto interventions in land management and land tenure (de Waal, 2009). Acting on land issues in post-conflict contexts is of crucial importance in order to support a peaceful transition after the conflict. The management of land relations is intrinsically linked to a range of peace benefits (Cramer and Weeks, 2002).

Future about conflicts: Looking to the future, it is difficult to avoid the disturbing conclusion that the issue of land, conflict and humanitarian action will need a more prominent place on the international agenda. An accumulation of adverse trends – economic downturn, the process of climate change, volatile food and energy prices – appear likely to create the conditions for conflict within and between states, some of them directly related to the struggle for land, water and other scarce resources (Guterras, 2009).

4 LAND ADMINISTRATION IN POST-CONFLICT CONTEXTS

Recognizing the important role that land is playing within the conflict and post-conflict period, drives this research to explore the existing literature how the land is managed and administered in these circumstances, that is the aim of this sub-section: to increase the understanding on the role of land administration in post-conflict contexts.

Land Administration: The term land administration has been introduced in the 1990’s and has probably the first time been given ‘official’ status by the UN/ECE Working Party on Land Administration (WPLA) in 1996 (Stuedler, 2004). According to the UN/ECE web site, the aim of WPLA is the promotion and improvement of land administration and land management at supporting security tenure, improving and creating more effective registers and promotion of sustainable land use policies (UN/ECE, 2015). The importance of effective land administration in support of good governance and economic development is well recognized internationally (Groot and van der molen, 2000).

The UN/ECE Land Administration Guidelines defines land administration as ‘the process of determining, recording and dissemination information about tenure, value and use of land when implementing land management policies’ (UN/ECE, 1996).

Land administration deals with ownership, use and value of land (Zevenbergen, 2002). Cadastres have registered the human terrain for centuries (Batson, 2008). ‘Ownership’ is to be seen in a broad sense: as land tenure, that is the mode in which rights to land are held, based on statutory law, common law, and customary traditions. ‘Value’ is to be understood as all kinds of values which land might have, depending on the purpose of the valuation, the use of the land and the method of valuation. ‘Land use’ is to be understood as all the kinds of use land might have, depending on purpose and use, classification and methodology (van der Molen, 2002).

The definition for the land administration from UN/ECE (1996) has been used in many policy documents and research studies, in this research it is the key guiding principle as well.

4.1 Land administration in post-conflict contexts

The situation in regard of housing and property rights and land administration in post-conflict contexts is difficult and multidimensional. Many of those conflicts have direct effect on the control over land and the rights of people relating to land and cause innumerable denials of HLP rights (Tibajjuka, 2007). Therefore, it is not possible to develop guidelines for all aspects for all countries and scenarios simultaneously, and addressing housing and property rights and land administration in such contexts requires an approach that copes with the local circumstances (van der Molen and Lemmen, 2004). Some of the land challenges that arise in post-conflict situations include: loss or destruction of property, secondary occupation, landlessness, insecure use or mobility rights and lack of clarity regarding ownership or use rights (UN-HABITAT, 2007).

The immediate post-conflict period is very complex, when many displaced people return to their places of origin and find their houses and properties destroyed, damaged or illegally occupied by secondary occupants (Leckie, 2000). Land disputes and conflicts over land and properties are frequent problem in post-conflict contexts. Conflict sensitive approaches to land dispute may vary based on factors such as the effectiveness of local and national land administration systems, the quality of land records, and the capacity of local administrators and adjudicators (UN-HABITAT, 2009).

Post-conflict situations lead to a dysfunctional land administration system characterised by: limited prioritisation of land policy; discriminatory land law; poor institutional and regulatory framework that allowed the grabbing of public and private land by powerful individuals and groups; poor management information systems for updating records as well as weak state capacity that was incapable of helping IDPs and refugees (Augustinus and Barry, 2006). Addressing these fundamental challenges, dealing with land

administration in post-conflict situations, is no longer a matter of choice, but a core responsibility of effective peace building. Once it is understood that HLP issues may trigger secondary or tertiary conflict, it is important for peace building missions to become aware that proposals related to land management and land administration in post-conflict situations are an integral part of efforts to restore peace and stability (UN-HABITAT, 2007). What is needed is a post-conflict land policy which focuses on the political dynamics of the conflict over land. The policy should give guidelines about the land law and the technical dimensions of land administration. Land professionals with experiences in the development of land policy documents and with appropriate knowledge in post-conflict context, could significantly contribute to this process (McAuslan, 2007).

The normative framework for addressing HLP rights in the context of displacement is summarised in the 2007: Principles on Housing and Property Restitution for Refugees and Displaced Persons (COHRE, 2007), known as ‘Pinheiro Principles’. ‘The Pinheiro Principles provide restitution practitioners, as well as states and UN and others agencies, with a consolidated text relating to the legal, policy, procedural, institutional and technical implementation mechanisms for housing and property restitution’ (COHRE, 2007). This document is a compilation of existing rights based documents in international human rights and humanitarian law. It acknowledges that all displaced persons should be protected regarding their HLP rights; the right(s) that they had to their property should be restored or if that is not possible be compensated. The Pinheiro Principles make some references to land administration issues as well (Pinheiro Principles: 13, 15, 16, 17, 20 and 21).

Housing and property rights and land administration issues are always negatively affected by the conflict and if not addressed properly in a post-conflict context they could be cause of secondary conflicts and even erupt in a new armed conflict (Todorovski et al., 2012).

Land administration systems can suffer in several ways during a conflict. The most obvious blow follows from the loss of staff and records (Zevenbergen and Burns, 2010).

4.2 Land professionals

Staff can be killed, (forced to) leave the area or not be able or willing to return to their jobs within land administration systems. In all cases it is important to quickly identify available experienced staff and try to get them back to work as soon as possible. Most land administration staff are professionals with specific expertise, and except for (top) managers their

position should not be political, but this depends much on local circumstances (Zevenbergen and Burns, 2010).

Experiences shown that too few of the engaged personal in the emergency phase have appropriate knowledge and skills in land administration issues which have their specific characteristics and need adequate approach for land administration in post-conflict contexts (HPG, 2008; Pantuliano, 2009). When -at the end of the day- a land registrar writes down a name of an owner in a land book, and a land surveyor draws a boundary line on a cadastral map, it could be either the start of a prosperous economic development, or the overture to a new conflict (van der Molen and Lemmen, 2004). The work of land registrars and land surveyors can be seen in a context of state and nation building (van der Molen, 2011).

4.3 Land records

Land records are the evidence of ownership and use rights. Land records are typically associated with formal land administration systems. In countries where land is administered through customary bodies, where formal legal systems are not accessible to significant parts of the population, records are kept locally and transactions recorded through simple sales contracts, witness statements or local knowledge and attribution (UN-HABITAT, 2009). During conflicts and immediately thereafter land records face a number of threats. They run the risk of being damaged or even lost due the hostilities, due the random violence directed at government offices or even targeted violence to land offices. In all cases there is however no (easy) access to the records. Land records can be simply ransacked or partly destroyed. Fully paper based systems are even more vulnerable since no formal back-ups usually exists (Zevenbergen and Burns, 2010).

Examples of the status of land records in different post-conflict contexts are as follows:

Kosovo: land records were taken away by retreating authorities when they were forced to leave the area, with good or bad intentions (Zevenbergen and Burns, 2010),

Somalia: land registries for the valuable irrigated areas in the central part of the country have been largely destroyed and will lead to significant problems once a central government and peace prevail (J. D. Unruh, 2004).

Burundi: many arrived to their villages of origin only to find their land and houses occupied by those they saw as responsible for the genocide and their exile; such persons had no reliable formal or informal system to regain their homes and lands and most were forced to return to the entry points at the border, where they were no longer eligible for food aid and household items,

as they had not managed to establish themselves in their villages of origin (UN-HABITAT, 2009),

Palestine: a copy of Ottoman land records of Palestine state rest in the UN building in New York (Zevenbergen and Burns, 2010),

Cambodia: During the Khmer Rouge era (1975-79) the state infrastructure was literally destroyed, for example, the land registration records were all lost (Törhönen, 2001),

Timor-Leste: the land and property building was among the first destroyed by militia activity along with most property rights records; the (Indonesian) head of the Dili land office took the main land books into safety during the violence in Timor-Leste (Fitzpatrick, 2002).

Some of the issues that need attention are finding and securing the land records that are (still) available and preventing illegal occupation and construction on the other land (Zevenbergen and van der Molen, 2004)

As a summary, the land records in post-conflict land administration contexts turn out to be a vulnerable subject and always negatively affected during the conflict. Fully paper based systems are even more vulnerable than digital ones, since no formal back-ups usually exist. Land records in post-conflict land administration contexts can be: damaged, stolen, lost, fraud or manipulated by powerful parties (groups), partly or fully destroyed, moved in third country or even be a target for violent attack (Todorovski, 2011).

5 SUMMARY ON LAND, OTHER RESOURCES AND LAND ADMINISTRATION IN RELATION TO CONFLICT AND POST-CONFLICT CONTEXTS

The role of land and other resources in the conflict and post-conflict contexts is attracting international attention and it is a real practical challenge for the global peace and security. Here follows a summary of findings regarding land, other resources and land administration in conflict and post-conflict contexts:

- resources in some cases motivate conflicts and usually support conflict financing,
- conflicts related with natural resources are twice as likely to re-emerge in period of five years,
- *scarce resource wars* hypothesis: the more scarce the resource, the more bitter the fight, but majority of literature argues that scarce resources are more relevant in generating small local conflicts rather than civil or inter-state wars,

- effects from climate change could lead to more natural caused catastrophes, research proved that climate change do influence the risk of conflicts and violent events,
- on a contrary to the theory of scarce resources wars hypothesis, a research on climate change shows that when resources are scarce then there are fewer conflicts – wetter years being less safe than dry years,
- agrarian relations - land reforms and land (re)distribution could be seen as triggers for violent conflicts,
- on resources it could be derived that they are key to the ‘sustainability’ of violence,
- refugees and IDPs are a common challenge of conflict and post-conflict contexts and together with this challenges land related issues pop up as urgent problem,
- land and property disputes and claims, usually arise when displaced persons return, or from dominance struggle over land and property rights,
- land-related topics that arise in post-conflict period are: loss/destruction of properties, secondary occupations, landlessness, insecure land rights, lack of clear ownership or use rights, access to land, forced transactions, not functional land administration systems, HLP rights etc.,
- UN-HABITAT underlines that addressing the fundamental land related challenges in post-conflict settings using the land administration as an instrument, is a core responsibility of effective peace building,
- the normative framework for addressing HLP rights in the context of displacement is summarised in the ‘Pinheiro Principles’ (COHRE, 2007) which make a reference to land administration in several chapters,
- land administration systems in conflict and post–conflict period mostly suffer in areas of loss of staff and land records,
- historically land administration issues have not been figured prominently in UN emergency and peace building operations (only in the cases in Kosovo and East Timor).

With a number of functions like support in establishment of land market, land use, setting the tax and management of state land, land administration in post-conflict is relevant and should be recognized in peace treaties. Parties involved in formulation of peace agreements and/or strategic action plans should mention land registration not as isolated objective but rather embedded in such plans for a wider development and land policy. Land administration is an appropriate instrument for implementation of the national land policy. Failure to address land issues in post-conflict period can create significant obstacles to humanitarian interventions and early recovery responses and, if unaddressed, it may contribute to renewed violence – a threat for eruption of secondary conflicts.

6 CONCLUSIONS

This research paper, based on a literature review, made an overview of conflict and post-conflict contexts in relation to land, natural and other resources and land administration in such contexts.

This research confirmed the recognition that land was identified as a critical gap in international response capacities. It revealed the identified need to ensure that land issues are put on the agenda of the international community and that they are tackled in the negotiations for the peace agreement document or National Land Policy of the states emerging from conflict as early as possible in the post-conflict period. Where, this was not the case, development of the land segment occurred later, resulting in complicating and slowing down the post-conflict state building. As it was shown from the conflicts in past land was seen as too politically sensitive or technically too complicated to be tackled early in the post-conflict period; this research has demonstrated that it was a mistake not to address land issues promptly.

This research explored the relation between land and other resources with conflicts and post-conflict contexts. Qualitative and quantitative researches were identified that helped to better understand what the role of the natural resources is in this period and how they motivate and finance conflicts. Resources scarcity and effects from climate change are also explored, and it was shown that this has an impact on the conflicts. This research continued with exploring the characteristics of the land and land administration specifically in a context of conflict and post-conflict contexts. At the end of a conflict displaced population in large numbers returns back in their places of origin. This research has shown that together with this land-related issues like: burned or destroyed houses and properties illegally occupied by secondary occupants are critical in the post conflict contexts. The normative framework for addressing housing, land and property rights in context of displaced persons is summarised as COHRE (2007), known as 'Pinheiro Principles'. In this research, land and property disputes and claims in post-conflict period were recognised as threatening issues, when left unaddressed they were a cause for new violent situations and secondary conflicts. The literature researched in this research confirmed that land administration systems suffered mostly from the loss of land records and loss of land professionals. Having acknowledged the goal of land administration and its potential, land administration was deemed as an appropriate instrument for implementation of the national land policy, and this should be embedded in a wider development plan of the state emerging from conflict.

Phenomenon acknowledged here is 'land administration in post-conflict contexts' and it requires further research. This research revealed that land

administration in post-conflict contexts could be recognized as one of the essential elements of the overall process of post-conflict state building.

REFERENCES

1. Augustinus, C. and Barry, M. B., (2006). Land management strategy formulation in post-conflict societies. *Survey Review*, 38(302), 668-681.
2. Barnett, J., (2001). *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*: Zed Books, London.
3. Batson, E. D., (2008). *Registering the human terrain: A valuation of cadastre*. Washinton D. C. USA: National defence intelligence college press.
4. COHRE, (2007). *Handbook on Housing and Property Restitution for Refugees and Displaced Persons, Implementing the 'Pinheiro Principles'*. New York, USA: United Nations Centre on Housing Rights and Evictions.
5. Collier, P., (2000). Rebellion as a quasi-criminal activity. *Journal of Conflict Resolution*, 44(6), 839-853. doi: 10.1177/0022002700044006008
6. Collier, P. and Heoffler, A., (1998). On Economic causes of civil war. *Oxford Economic Papers, Oxford University Press*, 50, 563-573.
7. Cramer, C. and Richards, P., (2011). Violence and War in Agrarian Perspective. *Journal of Agrarian Change*, 11(3), 277-297.
8. Cramer, C. and Weeks, J., (2002). Microeconomic stabilization and structural adjustment. In E. a. V. Wayne, R. (Ed.), *The Prevention of Humanitarian Emergencies*: UNU-WIDER Palgrave.
9. Daudelin, J., (2003). *Land and violence in post-conflict situations*. North-South Institute and the World Bank.
10. de Soysa, I., (2002). Paradise is a bazaar? Greed, creed, and governance in civil war, 1989-99. *Journal of Peace Research*, 39(4), 395-416. doi: 10.1177/0022343302039004002
11. de Waal, A., (2009). Why humanitarian organizations need to tackle land issues. In S. Pantuliano (Ed.), *Uncharted Territory: Land, Conflict and Humanitarian Actions* (pp. 9-26). Warwickshire, UK.: Overseas Development Institute.
12. EU-UN, (2012). *Land and conflict EU-UN partnership: toolkit and guidance for preventing and managing land and natural resources conflict*. New York, USA: UN Interagency Framework Team for Preventive Action.
13. FAO, (2005). *Access to rural land and land administration after violent conflicts FAO Land Tenure Studies*. Rome, Italy: United Nations Food and Agriculture Organisation (FAO).
14. Fitzpatrick, D., (2002). Land policy in post-conflict circumstances: some lessons from East Timor *New issues in refugee research* (Vol. Working paper No. 58). Timor-Leste.
15. Fitzpatrick, D., (2008). *Guidelines on addressing land issues after natural disasters: April Draft*, EMG, Geneva, Switzerland, 2008. .
16. Groot, R. and van der molen, P., (2000). *Final Report from the Workshop on Capacity Building in Land Administration for Developing Countries*. Enschede,

- the Netherlands: International Institute for Geo-Information Sciences and Earth Observations.
17. Guterras, A., (2009). Foreword In S. Pantuliano (Ed.), *Uncharted Territory: Land, Conflict and Humanitarian Actions* (pp. ix-x). Warwickshire, UK.: Overseas Development Institute.
 18. Hollingsworth, C., (2014). *A Framework for Assessing Security of Tenure in Post-Conflict Contexts*. (MSc), Faculty ITC, University of Twente, Enschede, The Netherlands. Retrieved from http://www.itc.nl/library/papers_2014/msc/la/hollingsworth.pdf
 19. Homer-Dixon, T. F., (1999). *Environment, Scarcity and Violence*: Princeton University Press, Princeton, New Jersey.
 20. HPG, (2008). *Uncharted Territory: Land, Conflict and Humanitarian Actions - Book Meeting Report*. Birkbeck College, London, United Kingdom: Humanitarian Policy Group (HPG).
 21. Korf, B. and Funfgeld, H., (2006). War and the commons: Assessing the changing politics of violence, access and entitlements in Sri Lanka. *Geoforum*, 37(3), 391-403. doi: 10.1016/j.geoforum.2005.08.002
 22. Le Billon, P., (2001). The political ecology of war: natural resources and armed conflicts. *Political Geography*, 20(5), 561-584. doi: 10.1016/s0962-6298(01)00015-4
 23. Leckie, S., (2000). Resolving Kosovo's housing crisis: challenges for the UN Housing and Property Directorate. *Forced Migration Review, FMR*(7), 12-16.
 24. McAuslan, P., (2007). Post-conflict land administration: a note. Retrieved 21 August, 2012, from <http://info.worldbank.org/etools/docs/library/240936/Postconflict%20Land%20Adm.pdf>
 25. Obama, B. H., (2009). *Remarks by the U.S. President at United Nations Secretary General Ban Ki-moon's Climate Change Summit* Retrieved from http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-UN-Secretary-General-Ban-Ki-moons-Climate-Change-Summit/.
 26. OCHA, (2005). *United Nations Humanitarian Response Review*. New York and Geneva: Office for the Coordination of Humanitarian Affairs (OCHA), United Nations.
 27. Pantuliano, S., (2009). Charting the way: Integreting land issues in humanityarian action. In S. Pantuliano (Ed.), *Uncharted Territory: Land, Conflict and Humanitarian Actions* (pp. 193-213). Warwickshire, UK.: Overseas Development Institute.
 28. Peluso, N. L. and Lund, C., (2011). New frontiers of land control: Introduction. *The Journal of Peasant Studies*, 38(4), 667-681. doi: 10.1080/03066150.2011.607692
 29. Peluso, N. L. and Watts, M., (2001). *Violent environments*: Ithaca: Cornell University Press.
 30. Putzel, J., (2009). Land governance in support of the Millennium Development Goals, a new agenda for land professionals *FIG Publication No. 45*. Washington D.C., USA: International Federation of Surveyors FIG and the World Bank.

31. Ross, L. M., (2004). What Do We Know about Natural Resources and Civil War? *Journal of Peace Research*, 41(3), 337-356.
32. Steudler, D., (2004). *A framework for the evaluation of Land Administration Systems*. (PhD), The University of Melbourne.
33. Takeuchi, S., Katayanagi, M. and Murotani, R., (2014). Conclusion Confronting land and property problems for peace. In S. Takeuchi (Ed.), *Confronting land and property problems for peace* (pp. 242-267). London, United Kingdom: Routledge.
34. Theisen, O. M., (2012). Climate clashes? Weather variability, land pressure, and organized violence in Kenya, 1989–2004. *Journal of Peace Research*, 41(1), 81-96.
35. Tibaijuka, K. A., (2007). Foreword *A Post-Conflict Land Administration and Peacebuilding Handbook* (pp. 3). Nairobi, Kenya: UN-HABITAT.
36. Todorovski, D., (2011). *Characteristics of post-conflict Land Administration with focus on the status of land records in such environment*. Paper presented at the FIG Working Week: Bridging the Gap between Cultures, Marrakesh, Morocco.
37. Todorovski, D., Zevenbergen, J. and van der Molen, P., (2012). Land administration in post-conflict environment – aspects relevant for South-East Europe. *South-Eastern European Journal of Earth Observation and Geomatics*, 1(2S), 47-59.
38. Törhönen, M. P., (2001). Developing land administration in Cambodia. *Computers, Environment and Urban Systems*, 25(4–5), 407-428. doi: [http://dx.doi.org/10.1016/S0198-9715\(00\)00049-1](http://dx.doi.org/10.1016/S0198-9715(00)00049-1)
39. UN-HABITAT, (2007). *A Post-Conflict Land Administration and Peacebuilding Handbook*. Nairobi, Kenya: UN-HABITAT.
40. UN-HABITAT, (2009). *Land and Conflict; Handbook for Humanitarians*. Nairobi, Kenya: UN-HABITAT.
41. UN, (1998). Housing and Property restitution in the context of the return of refugees and internally displaced persons (Vol. UN Resolution 1998/26). New York, USA: UN Sub-Commission on Protection and Promotion of Human Rights
42. UN, (1999). Report of the Secretary-General on the United Nations Interim Administration Mission in Kosovo, S/1999/779 (pp. 25). New York, USA: United Nations.
43. UN/ECE, (1996). *Land Administration Guidelines*. New York and Geneva: United Nations Economic Commission for Europe (UN/ECE).
44. UN/ECE, (2005) Social and Economic Benefit of Good Land Administration. *United Nations Economic Commission for Europe (UN/ECE): HM Land Registry*, London, on behalf of the UNECE WPLA.
45. UN/ECE, (2015). Official web-site of UN/ECE, Working Party on Land Administration Retrieved 10 January, 2015, from <http://www.unece.org/housing/working-party.html>
46. UNEP, (2009) From conflict to peacebuilding: The Role of Natural Resources and Environment. Nairobi, Kenya: United Nations Environment Programme (UNEP).

47. Unruh, J., (2001). Postwar land dispute resolution: land tenure and peace process in Mozambique. *International Journal of World Peace*, 18(3), 23.
48. Unruh, J. and Williams, R., (2013). Lessons learned in land tenure and natural resource management in post-conflict societies. In J. Unruh and R. Williams (Eds.), *Land and post-conflict peacebuilding*. London: Earthscan.
49. Unruh, J. D., (2004). Land and Property Rights in the Peace Process. In G. Burgess and H. Burgess (Eds.), *Beyond Intractability: Conflict Research Consortium*, University of Colorado, Boulder, Posted: January 2004 <http://www.beyondintractability.org/essay/Land_tenure/>. .
50. USAID, (2005) Land and Conflict - a toolkit for intervention. USAID - Office of Conflict Management and Mitigation, Washington DC, USAID.
51. UU-DPCR, (2012). Uppsala University, Department for Peace and Conflict Research (UU-DPCR). Retrieved 22 August, 2012, from http://www.pcr.uu.se/research/ucdp/definitions/#Peace_agreement
52. van der Molen, P., (2002). The dynamic aspect of land administration: an often-forgotten component in system design. *Computers, Environment and Urban Systems*, 26(5), 361-381.
53. van der Molen, P., (2011). Cadastres , Nations and States. *Magazine on positioning, navigation and beyond*.
54. van der Molen, P. and Lemmen, C., (2004). Land administration in post-conflict areas. In P. van der Molen and C. Lemmen (Eds.), *Symposium on Land Administration in Post Conflict Areas*. Geneva, Switzerland: UN-HABITAT and FIG Commission 7.
55. Westing, A. H., (1986) Global resources and international conflict: environmental factors in strategy policy and action. Oxford: Oxford University Press.
56. Witsenburg, K. M. and Adano, W. R., (2009). Of Rain and Raids: Violent Livestock Raiding in Northern Kenya. *Civil Wars*, 11(4), 514-538. doi: 10.1080/13698240903403915
57. Zevenbergen, J., (2002). *Systems of Land Registration, Aspects and Effects*. (PhD), Delft University.
58. Zevenbergen, J. and Burns, T., (2010). *Land administration in post-conflict areas; a key land and conflict issue*. Paper presented at the FIG XXIV Congress: Facing the Challenges - building the Capacities, International Federation of Surveyors FIG, Sydney, Australia.
59. Zevenbergen, J. and van der Molen, P., (2004). Legal aspects of land administration in post-conflict areas. In P. van der Molen and C. Lemmen (Eds.), *Symposium on Land Administration in Post Conflict Areas*. Geneva, Switzerland: UN-HABITAT and FIG Commission 7.