

The Environment and Rights in Poorly Regulated Construction Markets: Considerations for Emergency Cash Based Interventions¹

The provision of cash in the aftermath of crisis or during protracted displacement can help people access the things they need such as food, shelter or energy. But what if the sources of these goods and services are poorly regulated and have negative impacts on people and the environment? Does the immediacy of providing potentially lifesaving support override broader concerns of local market systems that might be unsustainable or contravene SPHERE and other standards that guide our work?

Earlier this year the first significant piece of work considering how the increased use of cash might interact with environmental considerations was released. [‘Looking Through an Environmental Lens - Implications and opportunities for Cash Transfer Programming in humanitarian response’](#) raised some interesting questions for those sectors that engage in markets with a substantial environmental footprint. Further reflection on applying an environmental lens to shelter and WASH programming has highlighted the close linkages between some markets that provide materials for construction with possible environmental degradation - and also related protection and human rights concerns.

Introduction

The construction industry uses huge volumes of materials sourced from the environment. Most of these materials such as sand are non-renewable² and extracted from sources that seem endless but are in reality finite. Others such as timber for construction or fuel are technically renewable³ but only if production and harvesting are undertaken in a carefully managed sustainable manner. Additionally the harvesting of these materials and the production of other construction commodities such as bricks are often labour intensive and engage large numbers of people, sometimes in very poor and hazardous conditions. The markets that provide these (and many other) commodities around the world are often extremely informal, poorly regulated and have significant impacts on the environment, the sustainability of local communities and the health and well-being of those they employ. A lack of regulation or oversight alongside potential profit margins have resulted in some markets that supply the construction sector sometimes becoming connected to large scale environmental degradation, low or inconsistent quality of materials, monopolisation, criminality, and human rights issues.

This short paper has been prepared to provide some examples and stimulate broader discussion of how humanitarian actors should engage in such markets - either directly or via the provision of unrestricted cash to beneficiaries – whilst ensuring impacts are addressed or at least minimised.

¹ The issues covered are equally relevant for in-kind support – but the focus of this paper is where responsibility for sourcing materials is placed with individuals and not restricted in any way.

² Definition: Non-renewable natural resources are exhaustible natural resources such as mineral resources that cannot be regenerated after exploitation. Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, United Nations, New York, 1997
<https://stats.oecd.org/glossary/detail.asp?ID=1829>

³ Definition: Renewable natural resources are natural resources that, after exploitation, can return to their previous stock levels by natural processes of growth or replenishment.. Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, United Nations, New York, 1997
<https://stats.oecd.org/glossary/detail.asp?ID=2290>

Environmentally Sourced Materials & Extractive Markets

Sand has become the most widely consumed natural resource on the planet after fresh water with the annual global consumption of sand for construction estimated to be 15 billion tons, with a trade value of 70 billion dollars⁴. Sand mining and extraction provides many examples of a basic construction commodity having significant environmental impacts – in this instance on rivers, deltas and coastal and marine ecosystems, resulting in the loss of land through river or coastal erosion and the lowering of water tables⁵. Additionally sand mining provides a source of significant revenue to organised crime, paramilitary organisations and corrupt officials. Recent articles in the [New York Times](#), [Al Jazeera](#) and [The Ecologist](#) give examples of the impacts of uncontrolled sand mining, and how the large profits to be made can lead to murder, extortion and other forms of violence whilst those controlling the trade seek to protect their interests.

The environmental implications of unmanaged timber harvesting and deforestation should be obvious, but the idea of "[Conflict Timber](#)" is a term that has only come into use recently, despite the financing of violent conflict through the exploitation of natural resources having a long history. A 2017 UN Environment Programme [report](#) estimated that in the Democratic Republic of Congo gold, minerals, timber, charcoal and wildlife products such as ivory, valued between US\$ 0.7-1.3 billion annually, are exploited and smuggled illegally out of the conflict zone and surrounding areas in eastern DRC.⁶ In the Central African Republic logging companies have paid millions of dollars to armed groups for access to [blood timber](#). A 2012 report from UNEP and INTERPOL [Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests](#) suggested that between 50 to 90 percent of forestry in tropical areas is now controlled by criminal groups and estimated that illicit logging is now worth between \$30 billion to \$100 billion, or up to 30 percent of the global wood trade⁷.

It is not only construction materials that combine environmental destruction with links to crime and conflict. Al Shabaab's activities in Somalia are funded in part from the export of illegal [charcoal](#) and wildlife products – a trade the [Kenyan Army](#) have been accused of ignoring by UN observers due to the illicit payments made at ports and borders. In a similar vein ISIS were estimated to be earning over \$1 million USD per day from the sale of [oil](#) and related products locally and internationally. With energy needs an increasingly key part of humanitarian support in many crisis settings it is easy to see how funds could inadvertently enter such illicit markets.

Labour

An additional aspect worthy of consideration when investigating construction related market systems is labour. The means of producing many materials are labour intensive, informal and high risk which present further challenges to ethical sourcing in some countries.

^{3&4} UNEP Global Environmental Alert Service – Sand, rarer than one thinks (2014) https://na.unep.net/geas/archive/pdfs/GEAS_Mar2014_Sand_Mining.pdf

⁵ https://postconflict.unep.ch/publications/UNEP_DRCongo_MONUSCO_OSESG_final_report.pdf

⁶ https://www.washingtonpost.com/news/wonk/wp/2012/10/02/report-most-tropical-deforestation-now-caused-by-the-mafia/?noredirect=on&utm_term=.97608e0a3ee5

The production of fired bricks presents one such example as was discovered after the 2010 floods in Pakistan⁸. An estimated 2 million children are thought to be working in illegal [brick factories](#) in Pakistan. These children are forced to work as their families are trapped in situations of indentured or bonded⁹ labour. This situation is common in many countries, including [India](#) and [Afghanistan](#) and similar issues exist in the production of gravel and [stone quarrying](#) in various countries around the world. Aside from child and bonded labour, women engaged in the construction sector in many countries find themselves facing [poor working conditions, wage discrimination and exploitation](#).

Conclusion: The importance of awareness and action

The markets involved in construction, housing, energy and related services are part of complex social, economic and environmental systems. The examples highlighted in this paper illustrate that in some settings many key commodities may have complex back-stories. When facilitating access to such commodities (either in-kind or when using markets through the provision of cash) humanitarian and development actors should have the awareness to identify risks and put in place mitigation actions which ensure that they are not inadvertently contributing to issues they are duty bound to address. Such actions might include working with environmental and other sector experts on awareness raising and within assessment, programme design and devising M&E indicators, working with selected market actors and local authorities to improve standards of practise, or promoting and supporting alternatives.

Utilising local market capacity is an area in which both the WASH and shelter sectors are keen to build experience and capacity. As part of this ongoing process the recent joint [advocacy paper](#) 'Increasing Sectoral Cash Transfer & Market Based Programming Capacity' highlighted the need to adapt existing market assessment and analysis tools to help meet the specificities of the sectors and the markets they engage in¹⁰. Part of such analysis must consider sustainability and the broader environmental implications of the sources of construction commodities that recovering communities may access or how such markets may contribute to other undesirable outcomes. The recommendations in the 'Looking Through an Environmental Lens' report provides some guidance on how this might be done and these ideas now need to be championed by donors and operational agencies and applied within programming so relevant learning can occur and be shared.

Rather than seeing this as yet another complication, such awareness could conversely provide opportunities for the strategic partnerships that are required for the meaningful mainstreaming of environmental and protection issues into humanitarian response. Through increased understanding possibilities may arise to work with specific markets through targeted support¹¹, advocacy and other interventions that could potentially help address causal issues and provide a focus for initiatives linked to longer term sustainability – or at the very least prevent inadvertent support, engagement or promotion of those markets that result in negative outcomes for people and the environment.

⁸ It is worth noting that a major donor refused to rebuild housing using fired bricks after the 2010 floods in Pakistan. They opted for a more rights and environmental friendly approach which resulted in more housing being built than if fired bricks had been used.

⁹ **Debt bondage**, also known as **debt slavery** or **bonded labour**, is a pledge of labour or services as security for a debt or other obligation, where there is no hope of actually repaying the debt. The services and duration required to repay the debt may be undefined and passed from generation to generation.

¹⁰ Markets include commodities, rent, land, services, transport, debt, remittances and skills/labour across a wide range of disciplines etc.

¹¹ One example is [sanivation](#) – a social enterprise engaged in promoting market driven sanitation services and producing cooking fuel from collected waste.