

Natural Resource Management and Peacebuilding in Afghanistan



United Nations Country Team in Afghanistan



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Foreword

Decades of conflict and instability have had a devastating impact on Afghanistan's people, economy and environment.

But while international attention focuses on the on-going insurgency and conflict between the Afghan national security forces supported by international military forces and a disparate group of anti-government armed groups, at any given time there are numerous conflicts happening at different scales and intensities.

Disputes over the management of natural resources such as land, water, timber, minerals and drugs, underlie and drive many of these conflicts, and often serve to exacerbate existing ethnic, political and regional divisions.

Natural resources are the source of numerous fracture lines in Afghanistan and the wider region. The division of water at local and transboundary levels, disputes over land ownership, the regional drugs trade, and the illegal smuggling of high value timber already generate tension and conflict. Recent investments in mineral and hydrocarbon extraction, if not managed carefully, could generate new problems.

This report looks at the ways in which natural resource management—the institutions, policies and practices that govern land, water, forests, minerals, hydrocarbons—interact with violent conflict in Afghanistan.

The report is the result of a request from the UN Country Team to the EU-UN Global Partnership on Land, Natural Resources and Conflict. The United Nations Environment Programme has led this process with the advice and support of other agencies, funds and programmes operating in Afghanistan.

In essence, the report makes two arguments. The first is that effective Natural Resource Management is a form of conflict prevention and peacebuilding.

The second is that no big development programme, whether from the government or international community, is entirely immune from the impacts of natural resource related conflict, nor to making the situation inadvertently worse.

We are grateful to the EU-UN Global Partnership on Land, Natural Resources and Conflict, funded by the EU's Instrument for Stability, which supported this process. We hope this report helps expand our understanding of the complex nature of conflict in Afghanistan and what the international community can do to strengthen the potential for lasting peace.



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Summary

This report investigates the ways in which the management of land, water, minerals, forests and drugs are linked to instability and insecurity in Afghanistan. Its aims are two-fold: first, to suggest ways that the government and the international community can maximise the peacebuilding opportunities that come from better natural resource management and, second, to encourage the international community to introduce safeguards in their existing projects to ensure they do not inadvertently exacerbate conflict.

Afghanistan's natural resources—its land, water, forests and mineral deposits—are critical to the country's prospects for a peaceful and prosperous future. An estimated 70-80 per cent of Afghans rely on agriculture, animal husbandry and artisanal mining for their daily survival. The country needs to harness these assets to create jobs, generate revenue to fund basic government services and lift the country from its position near the bottom of the Human Development Index.

Although the conflict that pits insurgents against government and international forces is the one that claims the most lives and the most attention, disputes over water and land were the two most commonly reported reasons for violent conflict, accounting for 55 per cent of all cases in a 2008 survey (it is important to note that the survey, conducted by Oxfam, was limited in scope and sample size, nor did it extend to all provinces). Natural resources play a variety of roles in conflicts of different scales, locations and intensities in Afghanistan.

- I. Communities, and sometimes countries, fight over scarce resources such as productive land and irrigation water.
- II. Powerful stakeholders use natural resources as instruments of coercion to exert control over others, such as upstream farmers controlling access to irrigation water for downstream communities.
- III. Natural resources are a source of illicit revenues that have built a powerful war economy and are sustaining serious corruption.

- IV. Natural resources act as incentives for peace spoilers (at a local, national and regional level) who have a vested interest in a continuing security vacuum.
- V. Natural resources are a source of grievance, especially where there is corruption that delegitimizes the government.

The central argument of this report is that better natural resource management has an important role to play in the wider process of peacebuilding. Under 'better' natural resource management, the benefits from natural resources are equitably divided; communities are involved in, and informed about, the decisions that affect them; contracts and payments are transparently conducted; and communities can raise and settle their grievances.

At its heart, effective natural resource management is a form of conflict prevention. By creating structures and rules for managing and sharing natural resources, natural resource management brings order, predictability and trust to situations where otherwise competition and conflicting interests would be rife. This report looks at the peacebuilding challenges and opportunities across five resources: land, water, forests, drugs and extractives.

I. Land

Decades of conflict have up-ended Afghanistan's land system. A mix of formal and traditional institutions governs a patchy and uncertain land tenure system. The Afghan government has attempted to modernise the land management system and since 2011 a new regime for managing land rights has existed in the form of the Afghan Land Authority, but the organisation is still in its infancy.

Ultimately the success of the various formal and traditional land management structures will be a function of how well they can address three challenges. The first challenge is to manage the growing demand for land: rapid population growth, returning refugees, and environmental degradation are



Afghanistan's natural resources – its land, water, forests and mineral deposits – are critical to the country's prospects for a peaceful and prosperous future

simultaneously constraining the amount of productive land available and increasing competition over land both in rural areas (for agriculture) and in urban centres (for building). The second challenge is to stop land grabbing: weak and inconsistent land management, endemic corruption, and insecurity have permitted opportunistic land grabs by powerful elites, which undermine the rule of law, and breed resentment among local people. And finally, the third challenge is to put in place the structures to resolve land disputes: Afghanistan needs to develop more effective mechanisms to resolve land disputes, which are inhibiting development and poisoning community relations.

Creating a functioning and equitable land system is an important element of long-term peace and stability in Afghanistan. The system needs to accomplish three things: (1) bring more land into productive use through better irrigation, soil conservation techniques, and extension services for farmers and herders; (2) build capacity for dispute

resolution; and (3) ensure that all major projects go through a 'peace and conflict assessment' screening process that evaluates the potential negative impacts of the project and that puts necessary safeguards in place.

II. Water

Water is a contentious resource in Afghanistan; research indicates that disputes over the allocation of water are the second-most commonly cited cause of conflict after land. Afghanistan's irrigation network and water storage capacities have been degraded by decades of war, underinvestment and inadequate management. Water management systems have to tackle three inter-related challenges. The first is to manage the increased demand for water: Population growth and economic development are rapidly increasing the demand for water. By 2025 the amount of water available per person is predicted to drop by one third from 2004 levels. The second challenge is to

reduce the risk of climate-related disasters: Droughts and floods are a feature of life in Afghanistan. Floods in 2009 killed nearly 1,200 people and affected almost 29,000 households. Third, is to build and rebuild water infrastructure without exacerbating regional tensions: with just one exception, Afghanistan's major rivers flow into neighbouring, water scarce countries.

Water can divide countries and communities but can also bind them together. Managing water resources effectively is critical for Afghanistan's development, security and stability. Addressing its many water problems requires an integrated approach that does the following; (1) reduces competition over scarce water resources through more efficient irrigation systems, drought resistant crops, and public awareness campaigns; (2) increases the supply of water through water harvesting and infrastructure investments; (3) improves water governance by addressing the inequitable access to water for marginalised groups (including women), reducing corruption in the sector, supporting the community management of water, and building capacity for dispute resolution; (4) understands and prepares for the impact of climate and other human-driven change that will impact Afghanistan's water security; and (5) improves transboundary water management.

III. Forests

After water, forests may be Afghanistan's most important renewable resource, as forest products (firewood, timber, animal fodder and tree crops) contribute to the livelihoods of millions. Forests provide a range of important ecosystem services; they are a critical source of rural energy but they also reduce the risk of soil erosion, land degradation and landslides. Meanwhile, the forestry industry in the eastern part of the country, if managed accountably and sustainably, has the potential to generate much needed revenue for the government and jobs for the local population.

Over the past 30 years, near-continuous conflict and a growing demand for timber and firewood have led to steep drops in forest cover. Meanwhile, the illegal timber trade, though limited to a few eastern provinces, plays an important role in on-going instability in these areas. It has created a lucrative shadow economy that reaches across

the border into Pakistan, providing incentives for powerful groups profiting from timber smuggling to perpetuate instability.

Afghanistan's forest sector faces two quite distinct challenges. The first is to reduce the rate of deforestation for firewood (increasing supply by planting woodlots and involving communities more closely in the management of their local forests). The second is to combat the illegal trade in high-value timber. One way to begin to address the illegal timber trade is to raise awareness of the impacts of the trade. Future steps could include some kind of certification scheme that provides a market for sustainably produced, conflict-free timber.

IV. Drugs

The drug economy in Afghanistan falls into the spectrum of natural resource management because poppies and hashish are both conflict goods and a means of survival for many rural communities. As such these illicit crops reflect decisions over the use of land and water. Afghanistan is the world's largest producer of both opium (generating roughly 90 per cent of global supply) and hashish. The drugs trade has become one of the main pillars of the Afghan economy accounting for an estimated 16 per cent of GDP, and involving an estimated five per cent of the population.

Drug production in Afghanistan has built a powerful shadow narco-economy that provides huge revenues for traffickers, as well as some insurgents. The drugs trade has also contributed to pervasive corruption at many levels of government. Finding ways to reduce the flow of drugs has been a major preoccupation of the government and international community. But drug cultivation in Afghanistan has expanded as the insurgency has gathered pace.

The illegal opium economy is an evolving system whose various dimensions and dynamics must be tackled through a careful mix of policies that integrate risks, incentives and feedback effects. The primary aims of such policies should be (1) to develop a comprehensive approach that strikes an effective balance between law enforcement, alternative livelihoods, and activities to reduce demand in destination countries; (2) to support alternative livelihoods in poppy producing areas;

and (3) to look for opportunities for transboundary collaboration to address drug trafficking.

V. Extractives

Afghanistan contains rich underground resources valued at upwards of one trillion dollars: gemstones, uranium, common metals, rare-earth metals and precious metals such as gold and silver. It also holds potentially valuable reserves of gas, oil and coal. Developing the country's mineral resources is a strategic priority for the Government of Afghanistan and the international community, who see the sector as an engine for growth and the best hope for Afghanistan to become financially self-sufficient.

The country is also strategically located between the gas reserves of Central Asia and the energy-hungry markets of South Asia. Afghanistan is a key leg in the long-discussed TAPI pipeline (so named because it plans to link Turkmenistan to India via Afghanistan and Pakistan), which could shift regional politics.

However, the extractives sector can be a double-edged sword. On the one hand it can generate jobs, earn revenue for government, and fund infrastructure. But on the other, the presence of rich mineral resources can be a 'curse' that breeds corruption and bad governance, stunts economic growth, and causes new environmental and social problems.

How these resources are managed will play an important role in the country's future stability. Developing a successful extractives sector that does not create or exacerbate conflict relies on the Afghan government's ability firstly, to minimise the negative social and environmental impacts of mining operations; secondly, to strengthen transparency and accountability in the mining sector to improve governance and tackle corruption; and lastly to provide responsible security around mine sites.

VI. Conclusions and recommendations

The effective management of Afghanistan's natural resources could greatly improve the country's prospects for peace and stability. Essential elements of an effective natural resource management strategy include improved resource governance and sustainability, better accountability, more community participation, stronger mechanisms for dispute resolution, reduced competition for resources, and improved transboundary resource management, among other things.

However, these objectives are much easier to describe than achieve. Ultimately, effective and lasting change will come from within Afghanistan and be led by Afghans, not imposed from outside.

The challenge for the international community is to find ways to support Afghanistan in that process: providing help where necessary, stepping back where appropriate. The international community can play five roles in particular. First, the international community needs to provide capacity-building support to help implement best practice NRM, facilitate and encourage public participation in decision-making, and encourage transparency and long-term planning. Second, it should support third-party mediation in regional and community-level natural resource disputes. Third, it should encourage better data collection and provide early warning alerts when vulnerabilities and risks are detected. Fourth, it can work to catalyze international responses and leverage funding to respond to emerging resource conflicts. Fifth, it must set a good example by making conflict-sensitive approaches a standard requirement for those development projects that have a significant impact on the country's natural resources.

Introduction

Afghanistan's natural resources—its land, water, forests, and mineral and hydrocarbon deposits—are critical to the country's prospects for a self-sufficient, peaceful and prosperous future. These resources underpin the livelihoods of the estimated 70-80 per cent of Afghans who rely on agriculture, animal husbandry, and artisanal mining for their daily survival.¹ The country needs to harness these assets to create jobs and generate revenue to fund infrastructure and basic government services. In time, Afghanistan's rich reserves of natural resources could lift the country from its position near the bottom of the Human Development Index.

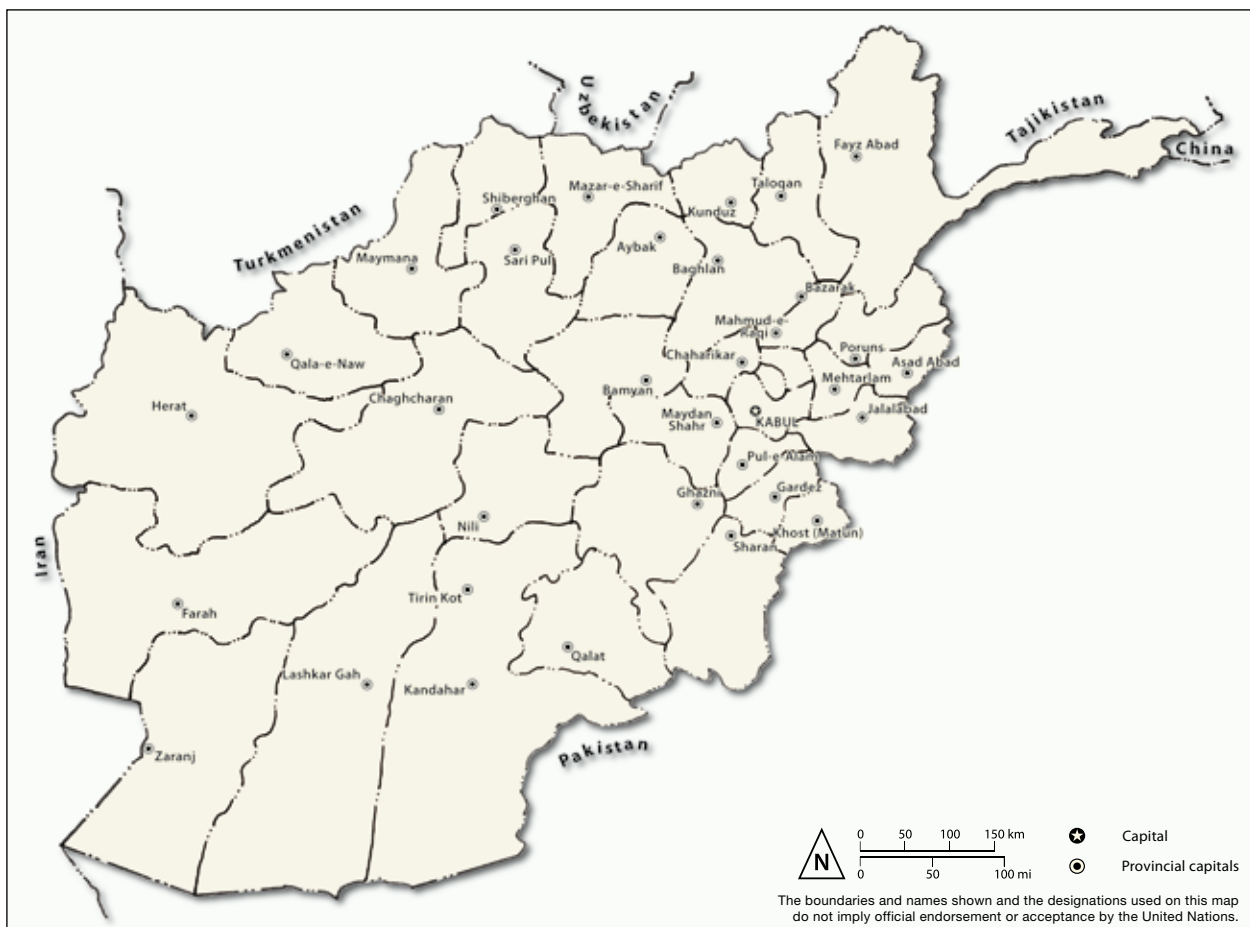
and international forces on the other. Although this conflict is the one that claims the most lives and gets the most international attention, the reality is more complex: at any one time, many conflicts are playing out at different scales, with different protagonists and fluctuating intensities. Disputes over natural resources, rather than ideological or ethnic differences, are a factor in the majority of these conflicts. Indeed, in a 2008 survey conducted by Oxfam in Afghanistan, disputes over water and land were the two most commonly reported reasons for violent conflict, accounting for 55 per cent of all cases.²

Conflict in Afghanistan

The international media often depict the conflict in Afghanistan as a clear-cut story of Taliban and Al Qaeda on one side versus the Afghan government

"Conflict"—in the sense of a disagreement over how to reconcile apparently incompatible interests—is a normal part of life, essential to change and development, which most people experience frequently. Conflicts over natural resources arise

Map 1. Afghanistan's provincial boundaries and neighboring countries





Aftermath of a 2012 IED attack in Kandahar. Although the national-level insurgency between anti-government elements and government and international forces attracts the most attention the reality of conflict in Afghanistan is more complex, with disputes over natural resources underlying many local and regional conflicts

when parties disagree about the management, allocation, use or protection of natural resources and their revenues.³ Conflict becomes a problem when it turns violent. This happens when the societal mechanisms and institutions for resolving conflict break down, usually in the context of wider issues of exclusion, social discrimination, economic marginalisation, and a perception that peaceful action is no longer a viable strategy for change. Societies challenged by weak institutions, fragile political systems and divisive societal relations can be dragged into a destructive spiral of conflict.⁴ All of these factors are at work in Afghanistan.

Natural resources play a variety of roles in conflicts of different scale, location and intensity in Afghanistan.

- I. Communities, and sometimes countries, fight over scarce resources such as productive land and irrigation water.
- II. Powerful stakeholders use natural resources as instruments of coercion to exert control over others, such as upstream farmers controlling access to irrigation water for downstream communities.
- III. Natural resources are a source of illicit revenues that have built a powerful war economy and are sustaining serious corruption.

IV. Natural resources act as incentives for peace spoilers (at a local, national and regional level) who have a vested interest in a continuing security vacuum.

V. Natural resources are a source of grievance (over land grabs or environmental damage from mining operations) especially where there is corruption that delegitimizes the government.

The daily lives of many Afghans are arguably more affected by these 'lower-level' local conflicts than the national-level insurgency. Anti-government elements have become adept at mobilising support based on unresolved grievances over resources like land and water, by positioning themselves with the aggrieved side and by providing summary justice on disputes that would otherwise languish in the overloaded court system.⁵ Meanwhile, on-going conflict has entrenched dependence on family and tribal relationships, which fuels patronage and corruption. And due to the prevailing societal structures, women and girls in Afghanistan are particularly vulnerable both to conflict and severe discrimination in terms of their ownership over, and rights to, natural resources.⁶

More than three decades of war have burdened Afghanistan with a heavy legacy of social, eco-

conomic and political damage. Between 1978 and 2001, a series of conflicts and regime changes killed nearly two million Afghan citizens, disabled or orphaned another million, and forced up to one-third of the population to flee the country, with many more displaced internally.⁷ Years of war devastated the social and physical infrastructure of Afghanistan, up-ended traditional systems of resource management, disrupted the education of a generation of Afghans, and impoverished the country. War also eroded community relations: a generation has grown up within Afghanistan not knowing peace, and a generation of Afghan refugees has grown up outside the country not knowing their homeland.⁸

Despite the past 10 years of initiatives following the 2001 invasion, which led to the removal of the Taliban government, the security situation in the country remains grave. UNAMA's 2011 annual report documented 3,021 civilian deaths in 2011 – the fifth year in a row in which civilian casualties increased, compared to 2,790 in 2010 and 2,412 in 2009.⁹ Since 2001, the continued conflict in Afghanistan

has cost approximately 30,000 lives, US\$500 billion, and untold suffering. Large parts of the country are inaccessible to government representatives and aid workers, even with elaborate security precautions.

Peacebuilding in Afghanistan

It is against this background that the international community is trying to achieve the ambitious but elusive goal of 'peacebuilding'. Fundamentally, peacebuilding is about addressing the root causes of conflict as it is experienced on the ground; it is about building a durable peace in which the causes and drivers of conflict are diminished and the incentives for peace are strengthened. 'Peacebuilding' goes beyond repeated intervention in a crisis; using nonviolent means, it seeks to *prevent* armed conflict from recurring. It requires establishing 'positive peace,' which is more than the absence of violence; peacebuilding aims to ensure justice through equity, the peaceful resolution of disputes, and the stabilization of society both politically and socioeconomically.



A generation has growing up within Afghanistan not knowing peace, and a generation of Afghan refugees has grown up not knowing their homeland



Peacebuilding goes beyond repeated intervention in a crisis to build a durable peace in which the drivers of conflict are diminished and the incentives for peace are strengthened

The UN Secretary-General's 2009 report on peacebuilding in the aftermath of conflict identified six priorities for peacebuilding: ensuring basic safety and security, encouraging inclusive political processes, restoring core government functions, providing basic services, and revitalising the economy by supporting livelihoods and generating jobs.¹⁰ Since then the Afghan government has been actively involved in the International Dialogue on Peacebuilding and Statebuilding, which resulted in the 'New Deal for Engagement in Fragile States.' Agreed at the 2011 Busan meeting in Korea, the New Deal aims to improve international support for peacebuilding in fragile and conflict-affected countries. Under its rubric, officials will work to establish common Peacebuilding and Statebuilding Goals (PSG) that support country-led pathways out of fragility and that help fragile states manage their resources more effectively.

The international community and the Afghan government have tried a range of peacebuilding interventions since the overthrow of the Taliban. They fall into three main categories: first, there have been attempts to broker high-level reconciliation between the government and the armed opposition through rounds of discussions called Peace Jirgas

("A Jirga" is a Pashto term for a decision making assembly of male elders), which are joint efforts by regional mediators and international conferences. Second, and at the other end of the scale, there have been community-level peace education and confidence-building workshops, which are often hosted by aid groups and NGOs. Third, there have been attempts to win 'hearts and minds' among the local population through investment in building and rebuilding infrastructure – repairing irrigation channels, constructing roads, building schools and so on. The essence of the idea is that delivering development projects will demonstrate to communities the benefits of not supporting the insurgency. This approach is most closely associated with the provincial reconstruction teams (PRTs), combined military and civilian units that have undertaken rehabilitation projects across the country. Each of these approaches is well intentioned, but it is difficult to see how well they have connected to each other or to the realities on the ground. Their impact on the on-going hostilities also remains unclear.¹¹

Afghanistan in transition

Troops from the United States, Britain, and other countries participating in the international military alliance are preparing to withdraw by the end of 2014, as agreed with the Afghan government. This transition will have significant ramifications for Afghanistan and the wider international community. As foreign forces withdraw, the Afghan National Security Forces (ANSF) will take on the primary responsibility of ensuring the security of the country, including counter-terrorism and counter-narcotic operations. The transition will also change the way in which the international community supports Afghanistan's efforts at economic growth and sustainable development, channelling a greater percentage of funds through government structures and reducing the in-country international presence.

The transition could have far-reaching effects on the politics and economy of Afghanistan, one of the world's most aid-dependent states and Asia's poorest nation.¹² At the Tokyo Conference in July 2012, international donors pledged US\$16 billion in support to Afghanistan between 2013 and 2017. However, it is widely expected that once the foreign troops depart and the plight of the country falls off the international agenda, there may be a

significant drop in foreign aid, despite the pledges to the contrary.¹³ This means that Afghanistan will increasingly need to look to its own resources to provide for its security and development. Indeed, the international community is betting that future exports of minerals and hydrocarbons will help to offset the drop in international financial support, but such an outcome is far from guaranteed.¹⁴

The central argument of this report is that better natural resource management has an important role to play in the wider process of peacebuilding. Under 'better' natural resource management, the benefits from natural resources are equitably divided; communities are involved in, and informed about, the decisions that affect them; contracts and payments are transparently conducted; and communities can raise and settle their grievances. Seen this way, natural resource management becomes a form of conflict prevention and conflict mitigation. By creating structures and rules for managing and sharing natural resources, effective natural resource management can bring order, trust, and predictability to situations where otherwise competition and conflicting interests are rife.¹⁵

About this report

This report investigates the ways in which the management of land, water, minerals, forests and drugs are linked to instability and insecurity in Afghanistan. Its aims are two-fold. First, the report identifies ways that the international community, in particular UN agencies, can develop and implement programmes that maximise the peacebuilding opportunities that come from better natural resource management. Second, it aims to encourage the international community to introduce safeguards in their existing projects and plans to ensure they do not inadvertently exacerbate existing conflicts.

This report draws its raw material from extensive consultations with Afghan and international experts in Afghanistan and elsewhere (London, Washington, and New York) supplemented by desk-based literature on natural resource management in Afghanistan and ten years of UNEP's experience supporting environmental protection and natural

resource management in the country.¹⁶ This report also draws on two recent bodies of work on natural resource management and peacebuilding at a global level. The first is a series of guidance notes produced in 2012 by a cross-UN working group called the UN Framework Team on Preventive Action. These guidance notes provide advice and ideas to UN agencies on managing natural resources in conflict-affected and fragile states at a global, and consequently fairly general, level.¹⁷ The second is an extensive series of case studies of post-conflict natural resource management produced by UNEP, the Environmental Law Institute, the University of Tokyo and McGill University which have generated lessons on what has been tried, and what has worked in post-conflict situations, some of which are applicable to Afghanistan.¹⁸

The report is directed at members of the international community and Afghan government officials involved in development planning and peacebuilding activities within the country. The report tries to be concise, accessible and readable for busy professionals. However, these are hugely complex issues that this report cannot hope to describe fully in the space available. Consequently, the analysis does not aim to be comprehensive and the recommendations are suggestive rather than prescriptive. The report was developed in close collaboration with the Natural Resources Contact Group of the UN in Afghanistan and produced at the request of the UN Country Team as part of a project led by the United Nations Environment Programme (UNEP) in partnership with the European Union-United Nations Global Partnership on Land, Natural Resources and Conflict with funding from the EU's Instrument for Stability.

Sections two to six look at five of the country's key natural resources in turn: land, water, forests, drugs and extractive resources (hydrocarbons and minerals). Each section sets out the broad context and challenges for that resource and describes some ideas for maximizing the opportunities for peacebuilding. Each section, which is necessarily brief, has a few suggestions for further reading. The report finishes with some broad conclusions and recommendations for action by the Afghan government and the international community.

1. Land

Afghanistan is a high, arid country with little productive land. Just 7.8 million of the country's 64.9 million hectares are suitable for agriculture. Of that area, only 3.3 million hectares can be irrigated; wheat is the most commonly grown crop.¹⁹ Meanwhile, millions of people rely on the approximately 30 million hectares of grass rangelands as pasture for small livestock, mostly sheep and goats.²⁰ The rest of the country is largely barren desert or high mountains unsuitable for agriculture or livestock.

A 2008 survey reported that disputes over land were the single most common cause of violent conflict in Afghanistan.²¹ This is not a new phenomenon: inequalities in the ownership of land, ethnic tensions over access, and insufficient land reform initiatives have generated and sustained conflict for decades.²² As is the case in many other countries, land in Afghanistan is not only a vital economic

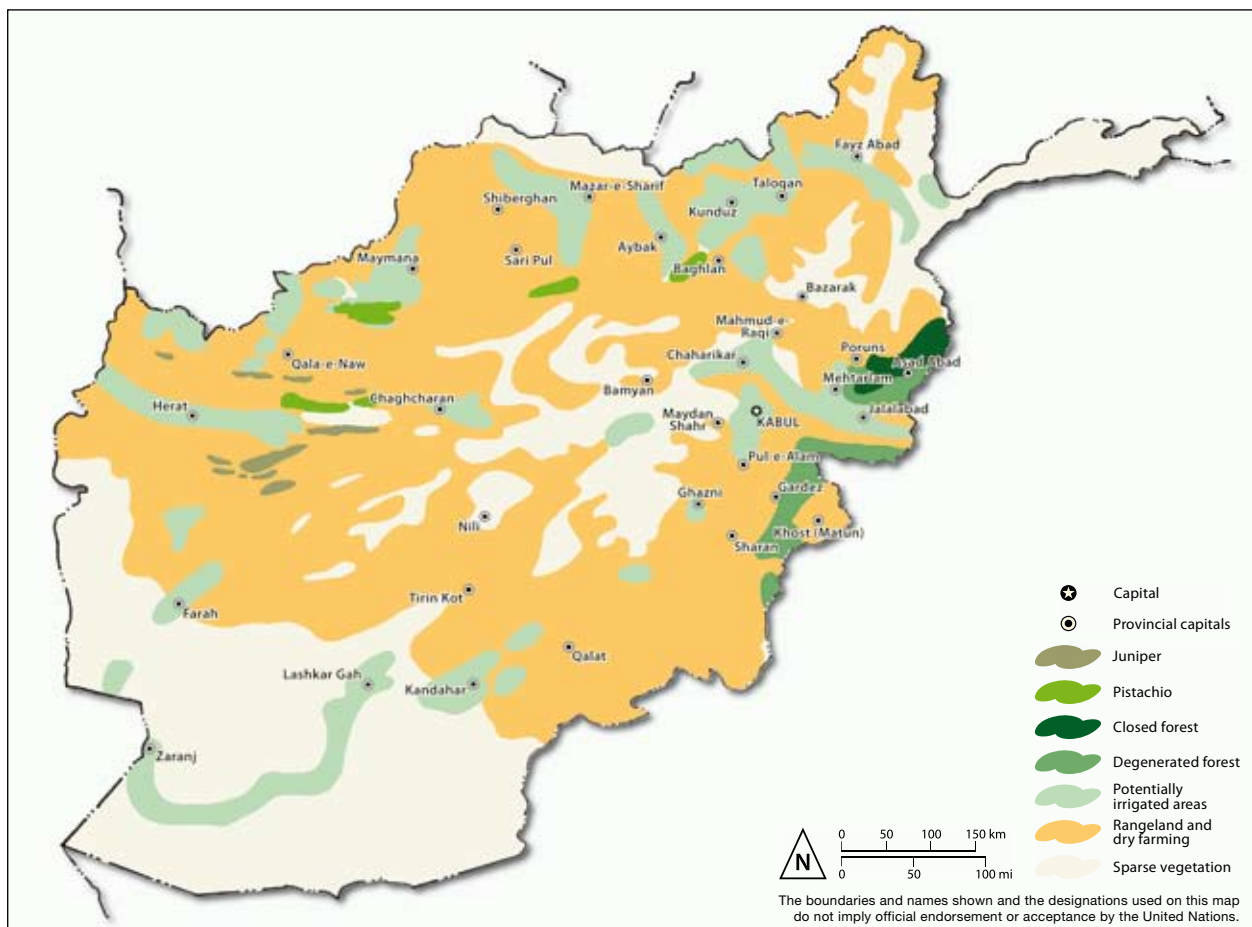
asset and a source of survival; it is also highly emotive, given its close links to community, identity, history and culture.²³



1.1 Context and challenges

Decades of conflict have upended the country's land system. The present legislation on land tenure is complex and patchy. Land records have been lost or destroyed while landowners, land users, and the civil servants who would be able to administer a land management system have fled or been killed. The land tenure system has been governed by a number of legal frameworks, which have been interpreted differently by successive administrations. Those administrations have occasionally awarded the same land

Map 2. Land usage in Afghanistan





With just 12 per cent of land suitable for agriculture, land is a vital economic asset in Afghanistan

to different groups. The confusion of the system has also led to divergent definitions of what constitutes communal land, wasteland and private land; it has also given rise to contradictions between traditional and modern land tenure systems.

In light of these challenges, the Afghan government has attempted to modernize the land management system, starting in 2003 with the Policy and Strategy for Forest and Rangeland Management (2006), the National Land Policy (2007), and the Rangeland Law (2008). Since 2011 a new regime for managing land rights has existed in the form of the Afghan Land Authority, but the organisation is still in its infancy and it is not yet well recognized or embedded at the local level.

In practice, Afghanistan's land is governed by an unpredictable mix of statutory and traditional institutions, which itself is a reflection of the challenge that the centralised state faces in governing effectively at a local level. Many management functions have fallen, by default, to the courts that are supposed to handle the bulk of land disputes. However, the commonly held perception of the slow response times of the courts, combined with their reputation for susceptibility to corruption and coercion by powerful interests, have undermined the courts' credibility as a forum for dispute resolution. As a result, most rural Afghans resolve questions of land

ownership through traditional structures, steering clear of discredited officials and the courts. These structures may provide a strong foundation (some argue they have helped to prevent a descent into complete lawlessness²⁴) but they are also riven with customary practice that tends to favour men, wealthier elites, and dominant ethnic groups.²⁵

The structures and institutions managing land are hybrid and evolving. Ultimately, their success in terms of wider peacebuilding will be a function of how well they can address three daunting challenges: managing the growing demand for land, stopping illegal land grabs, and finding ways to effectively resolve land disputes. Each of these has the potential to spark or aggravate conflict.

Managing the growing demand for land

The first challenge is to ensure that the growing competition for land is somehow met and mediated. Rapid population growth, high numbers of returning refugees, and environmental degradation are simultaneously constraining the amount of productive land available and increasing competition over land both in rural areas (for agriculture) and in urban centres (for building). Arable land per capita was 0.55 hectares in 1980 but by 2007 this had fallen to 0.25 hectares per person.²⁶

Despite some of the highest rates of infant and child mortality in the world (nearly one in five Afghan children die before their fifth birthday), Afghanistan's 2.7 per cent population growth rate is among the highest in the world.²⁷ The country's population has nearly tripled over the past 40 years from 11 million in 1970 to an estimated 30 million today. This is translating to particularly rapid growth in urban areas. In just 10 years, Kabul's population has expanded from a low point of 300,000 in 2001 during the peak of the fighting to roughly four million today.²⁸ An estimated 70 per cent of Afghanistan's urban population lives in unplanned areas or illegal settlements.²⁹

Against this backdrop, Afghanistan has witnessed one of the most significant movements of refugees in recent history. Since 2002 an estimated 4.6 million refugees have returned to Afghanistan, all hoping to re-establish themselves and their families either in their ancestral village homes or in the cities.³⁰ In the first eight months of 2012, an estimated 50,000 refugees voluntarily returned from Pakistan. This represents a 12 per cent increase over the same period in 2011. An estimated 2.7 million refugees remain outside the country, mainly in Pakistan (1.7 million) and Iran (1 million). The government of Pakistan has announced that it plans to expel the remaining refugees; if that happened, it would, at a stroke, increase the population of Afghanistan by

5 per cent, presenting the Afghan government with the enormous challenge of coping with the influx.

Many of these refugees have been out of the country for many years. In the intervening time their land may have either fallen into disuse or been occupied by others. Unravelling the history of secondary occupation and determining who has the right to occupy a particular piece of land has proven hugely complex and controversial.³¹ UNHCR's 2012-2014 Solutions Strategy aims to increase Afghanistan's currently limited ability to absorb refugees.³² However, a lack of consensus on the laws and procedures governing the return of refugees has driven local tensions and led to accusations that incoming refugees are 'grabbing' land that is not rightfully theirs.

Finally, environmental degradation caused by deforestation, poor land management and soil erosion has undermined the utility and value of large areas of land. A global assessment of soil degradation found that about 16 per cent of Afghanistan is severely affected by human activity, while three quarters of the country is vulnerable to desertification. Increasing salinization, falling water tables, and widening deforestation have left Afghanistan increasingly vulnerable to natural disasters such as flooding and landslides.³³



Kabul's population is rising at a rate of 4.9 per cent every year as a result of returning refugees and people leaving rural areas in search of work. This is one of the fastest rates of urban growth in the world

Stopping land grabbing

The second challenge is to establish a reliable, equitable system of land management that reduces the scope for illegal takeovers of land. Weak and inconsistent land management, endemic corruption, and insecurity have permitted opportunistic land grabs by powerful elites, which local populations refer to as the 'land mafia.' In 2007 the urban development minister suggested that land was being appropriated and sold on at a rate of 2km² a day.³⁴ Thus far the government has demonstrated little capacity or willingness to address land grabbing in a systematic way.

Occasionally international reconstruction projects have inadvertently exacerbated the situation. Road building and infrastructure projects have increased the accessibility (and land value) of some areas, resulting in land around the new projects being taken from local people.³⁵ In Nangarhar a road building project in 2010 to build a side road to the Achin district from the Jalalabad-Peshawar highway increased the value of land around it sufficiently for it to play a role in renewed fighting over that land between the Alisherkel and Sipai sub-tribes of the

Shinwari Pashtuns. The non-irrigated land had been disputed for a generation but had never held sufficient value for one side to seize it until the road was constructed.³⁶

Resolving land disputes

The third challenge is to set up more effective mechanisms to resolve land disputes. There are a number of long-running disputes (for example, see Box 1) that inhibit development and poison community relations. Meanwhile, attempts to implement a land management system (such as a land registry) that works across the country have proven difficult. Previous initiatives by the Afghan government to document rural land ownership have failed to win the confidence of local people,³⁷ while many government officials in Kabul are suspicious of community-level programmes over which they have little control.³⁸ Afghanistan used to have a strong traditional system of arbitration and mediation, provided by Jirgas or Shuras of tribal elders and based around concepts of sharia law. These functioned relatively well in the past, especially for local, low-level issues. While many of these have been weakened by the years of conflict, they pro-



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Road building projects have changed the value of local land and have led to illegal land seizures in some areas



Kuchi nomadic herders. The dispute between the Kuchis and the Hazaras over access to the high pasture areas of the Central Highlands has lasted over a century

Box 1. The Hazara-Kuchi dispute

Perhaps the best-known and longest-running land dispute in Afghanistan is between the Hazara and the Kuchi tribal groups over access to the pastures of the central mountains.³⁹ The dispute began in 1894 when the British granted the pastures of Hazarajat, which had customarily been used by the Shia Hazaras, to the Sunni Kuchis, who are nomadic Pashtun pastoralists.

The issue has been at the heart of contested inter-ethnic relations for over a century, with different administrations favoured one side or the other, and has frequently flared into violence. In 2009 there were reports of Hazara communities constructing trenches at strategic entry points to the central highlands amid rumours of Taliban arms being provided to the Kuchi and Iranian support for the Hazara.⁴⁰

vide locally known and supported structures and traditions upon which to build. These systems will be tested by the expansion of the mining industry, which will likely lead to extensive resettlement, both voluntary and forced, of populations living on new mining concessions.

1.2 Maximizing the opportunities for peacebuilding

Building a functioning, equitable system for managing land will prove an important factor in long-term peace and stability in Afghanistan. Indeed, there have been many attempts to promote land reform in Afghanistan. These efforts have focused on a variety of challenges: developing policies, supporting the community documentation of land, building mediation structures, and attempting to resolve specific disputes.⁴¹ However, it is not an easy or quick endeavour. UN Habitat estimates that it takes on average 25 years to build an effective land administration

system in a post-conflict setting, and Afghanistan is yet to become a 'post-conflict' country.⁴²

Afghanistan established a new regime for managing land rights in 2011, but the links between national-level policy and local forms of ownership remain weak. There is on-going debate over the most effective scale for land management, whether it is best conducted at a national, provincial, or local level. Much of the international assistance has been focused on Kabul, and this may have contributed to an overly centralized system that ignores customary structures and is out of touch with the reality on the ground. But the authority of central government seldom extends to the community level,⁴³ and before 1979 the central government was rarely involved in settling land disputes at all.⁴⁴ This has led some experts to argue that land administration and management would have to be fully devolved to the local level before the majority of land interests could be brought under a form of record-based ownership.⁴⁵

For land management to contribute to peacebuilding, ultimately the system needs to reconcile private and communal land tenure systems; provide for careful restitution of land rights where appropriate; support greater land ownership by marginalised groups; and develop innovative approaches to conflict-avoidance, such as securing rights for informal settlements and developing open-border models of overlapping land rights.⁴⁶ In terms of the 'conflict potential' of land management, three areas may be particularly important to focus on.

I. Bringing more land into productive use

Although there is increasing competition for agricultural land, only half of the land that the government has classified as suitable for farming is under cultivation.⁴⁷ Better irrigation, soil conservation techniques and extension services for farmers and herders will help to maximize the productivity of existing agricultural and range-lands. Ultimately, better land management techniques, combined with strengthened recognition of customary land rights, will not only make the land more productive; they will also increase the total amount of land available for cultivation.

II. Building capacity for dispute resolution

'Quick fix' solutions to long-running land disputes in Afghanistan have proven elusive in the past.⁴⁸ However, the international community can do more to help the Afghan government (at local and national levels) develop a comprehensive, systematic approach to resolving land disputes in the country that includes national and local government, traditional authorities and civil society.

First, the international community should help the Afghan government better understand existing land-related conflicts – and their underlying grievances – so that government officials can properly address the core issue that is being contested.⁴⁹ Second, the international community should help the national government and Afghan civil society groups address land conflict within a broader strategy of conflict prevention. Such a strategy should include building capacities, at both provincial and district levels, for dispute resolution; encouraging transparency and accountability; empowering marginalised groups; and trying to move beyond 'zero-sum' approaches to land disputes. Third, the international community can help Afghan officials



Traditional Shura councils are often the sole way to resolve land disputes in remote regions



Better irrigation, soil conservation techniques and extension services for farmers and herders will help to maximise the productivity of existing agricultural and range-lands

learn to monitor the land disputes, evaluate their own interventions, and learn from results.⁵⁰

III. Implementing conflict-sensitive approaches

Finally, the enormous reconstruction and rehabilitation projects in which the international community engages – projects that often pump millions of dollars of aid money into impoverished areas – can inadvertently legitimize illegal land claims or have other adverse effects on local land tenure. Due in part to the complex, dynamic, and highly mobile nature of communities throughout Afghanistan, development initiatives are frequently hijacked by local power elites and large landholders, or misdirected to benefit a few. The international community must employ safeguards (such as careful assessment, monitoring and local consultations) to prevent this from happening (see Annex 3).

Agricultural interventions, or those that focus on land management, typically benefit those with land,

exacerbating rural inequalities. The international community needs to ensure that its projects are not contributing to tensions or exacerbating conflict, particularly where it is engaged in large infrastructure projects (roads, dams, electricity transmission lines etc.) that may have significant impacts on value and usage of local land.

All major projects, and particularly infrastructure and high-value natural resource investments, should go through a 'peace and conflict assessment' screening process, preferably conducted by an independent party, that evaluates the potential negative impacts of the project and that puts necessary safeguards in place (such as public consultation, a grievance process, etc.) to ensure that communities' concerns are taken into account and that their needs are met. Annex 3 provides some initial guiding questions for such a screening process that provides a structured way to assess the context and the intervention and find ways to maximise the opportunities for peacebuilding.

2. Water

Water is a precious resource in Afghanistan: predictable and sufficient rains are essential for the agricultural and pastoral livelihoods on which most Afghans rely. Like land, water is inequitably shared and highly contentious: in a 2008 survey, disputes over the allocation of water were the second-most commonly cited cause of conflict after clashes over land.⁵¹ Afghanistan is covered by five major rivers basins and all but one of its major rivers flow outside of its borders.

2.1 Context and challenges

Each year Afghanistan receives an average of 2,775m³ of surface water per capita across five major river basins (The Northern, Amu / Panj, Harirod-Mughab, Kabul and Helmand river basins), which is above the threshold of 1,700m³ of water considered necessary to satisfy a population's

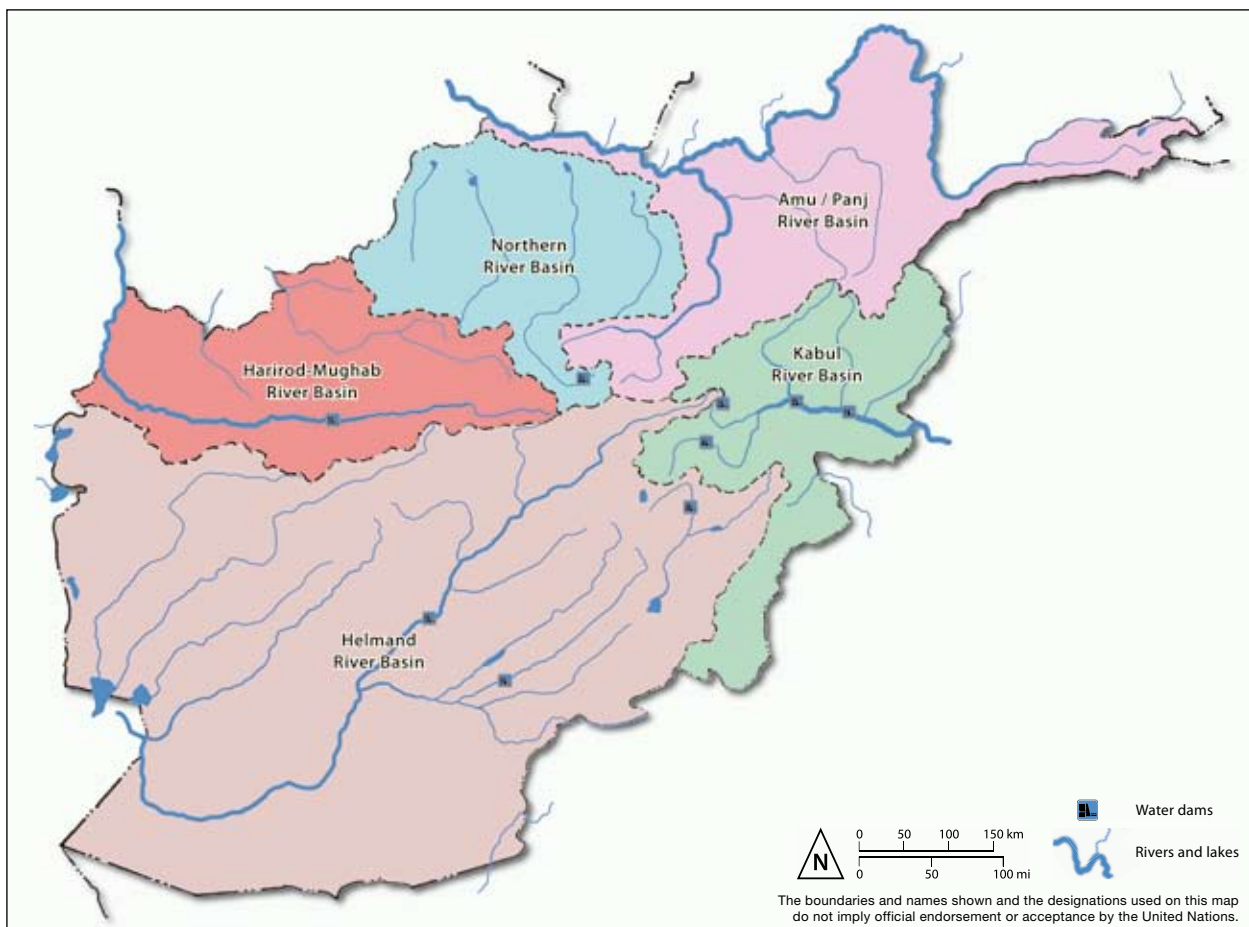
water requirements.⁵² But these averages hide large variations. Sufficient water does not always reach the

areas where and when it is needed, that is to say near irrigable land or population centres. The northern river basin, for example, has 20 per cent of the country's irrigated land but only 3 per cent of its water resources. In fact, the area receives just 676m³ of water per person per year, close to the absolute threshold for water scarcity of 500m³.

Afghanistan's irrigation network and water storage capacities have been degraded by decades of underinvestment, conflict and inadequate management. Afghanistan has the lowest storage capacity in the region and one of the lowest storage rates in the world: now estimated at below 100



Map 3. Afghanistan's river basins and water infrastructure





Irrigation channel in Bamyan province. Water gives irrigated agricultural land its value and is critical to farmers' livelihoods

cubic metres per capita.⁵³ According to the latest estimates, irrigation reaches an estimated 1.8 million hectares, barely 60 per cent of the area that was irrigated in the mid-1970s.⁵⁴ Meanwhile, years of conflict have corroded community relations and traditional water management systems, further exacerbating tensions and conflict over water.

Land and water issues are intimately related. Agriculture absorbs 95 per cent of all of the water used in the country and land degradation in the upper catchments is a major factor in the rapid siltation of Afghanistan's irrigation and water storage networks.⁵⁵ Traditionally *mirabs*, locally elected representatives, allocate water among farmers. The water is distributed through irrigation channels or – particularly in the south and east of the country – through hand-dug, gravity-fed underground channels called *karez*. Access to irrigation water is mainly based on the location of fields within a particular canal system.⁵⁶

Water gives agricultural land its value: one study estimated that irrigated land with reliable access to water has a value four to 14 times greater than that of rain-fed land.⁵⁷ The availability of irrigation water determines many farmers' incomes: wheat

yields from irrigated land are roughly three times greater than from rain-fed land.⁵⁸ With 36 per cent of Afghans living in absolute poverty, fluctuations in available water can be devastating for rural areas. During periods of drought, wheat yields decline on average by 40-55 per cent; up to 70 per cent of Afghan households will lose some livestock.⁵⁹ The inequitable distribution of water remains a source of considerable tension and potential violence within Afghanistan.⁶⁰ Indeed, tensions over water are often an underlying factor in other conflicts that may be labelled as ethnic or tribal in nature.⁶¹

Water is also an issue of tremendous regional sensitivity. With one exception, Afghanistan's major rivers flow into neighbouring countries: Iran, Pakistan, Uzbekistan, Turkmenistan and Tajikistan.⁶² These countries are struggling to secure enough water to grow their economy and support their populations' livelihoods: per capita water availability in Iran is 1,400m³ and in Pakistan is 1,200m³—half that of Afghanistan (2,775 m³). The rivers flowing out from Afghanistan tie the country to its neighbours. Managed well, they could be a source of cooperation and mutual benefit, but they are also a potential cause of serious conflict.



Water demand is growing fast, particularly in Kabul where it is estimated that water demand will increase six fold over the next 40 years

For example, the Helmand River runs southwest from Wardak through some of the most insecure provinces in Afghanistan (Helmand and Nimroz) before draining into the Sistan Basin depression shared with Iran. This river has been a source of intermittent dispute between the countries since 1872.⁶³ Meanwhile, the Panj River forms part of the northern border between Afghanistan and Tajikistan. It then flows into the Amu Darya river, which travels through Turkmenistan and Uzbekistan to the Aral Sea and has itself proved to be a significant source of tension between those countries. Afghanistan currently draws an estimated two cubic kilometres of water from the Panj River out of a possible nine cubic kilometres allowed under the terms of a 1946 agreement with the Soviet Union. Although a major increase in Afghanistan's water withdrawal would have potentially serious impacts on its downstream neighbours⁶⁴, Afghanistan has not been involved in any of the agreements over the Aral Sea Basin signed by the Central Asian states since the end of the Cold War.⁶⁵

The water sector has been under reform since the 2002 Kabul Conference on Water Resource Management and Development.⁶⁶ A water sector strategy created under the infrastructure pillar of the Afghan National Development Strategy (ANDS) sets

ambitious goals for improvements in access, governance and infrastructure.⁶⁷ In 2009, the Afghan government enacted a Water Law which sets out a framework for the water sector based around three pillars: integrated water resource management (IWRM), river basin management, and participation in decentralised decision-making via river basin agencies (RBAs), and river basin councils (RBCs). However, these national-level efforts have struggled to produce tangible progress on the ground.⁶⁸

Access to clean water is one of many priorities for the water sector. Three quarters of Afghans lack access to safe drinking water,⁶⁹ and an estimated 23 per cent of child mortality is directly attributable to contaminated water and poor sanitation.⁷⁰ Over the next 10 to 20 years, the Afghan government will face three particular challenges with regard to managing potential conflicts over water. The first challenge is to manage increased demand for water; the second is to cope with the water-related disasters (floods and droughts) that are predicted to become more frequent and intense as a result of climate change; and the third is to build – or perhaps rebuild – water-related infrastructure for agriculture, water storage, and hydroelectric energy production in ways that do not increase local and cross-border tensions.

Managing increased demand for water

Population growth and economic development are rapidly increasing the demand for water in Afghanistan. It is estimated that by 2025 the amount of water available per person will drop by one-third from 2004 levels, and by more than 50 per cent by 2050. This would push the average per capita water allocation in Afghanistan well under the threshold for water stress. Some parts of Afghanistan, such as the Northern river basin, would fall below the absolute threshold for water scarcity,⁷¹ with potentially serious implications for food security.⁷²

The situation is particularly acute in fast-growing urban areas. Demand for water in Kabul began to exceed supply in 2012 and projections indicate that, by 2050, the capital city may require six times as much water as it does now.⁷³ In addition, Afghanistan is actively seeking to develop its mineral deposits (see section 6); mineral extraction could be very water intensive and could affect the quality of available water. If not monitored and managed properly, such activity could lead to large-scale pollution of water sources. For example, it is estimated that the new copper mine at Aynak 30 kilometres from Kabul, which is currently in the early stages of development with funding from China, will require large quantities of water to process the copper ore; one estimate is that the mine will use 43 million cubic metres of water annually by 2020.⁷⁴

Reducing the risk of climate-related disasters, and adapting to climate change

Given Afghanistan's reliance on already unpredictable snow and rainfall, it is unsurprising that the country is heavily affected by the natural climatic fluctuations—drought and floods—that are a feature of the region. The rapidity of flash floods in the steep terrain, a lack of flood defences and the fact that many people live in marginal, insecure locations means that the rate of flood deaths in relation to the population's exposure to floods in Afghanistan is among the highest in the world. The average number of flood-related fatalities in Afghanistan is almost 20 times greater than in the US, which has a similar sized population exposed to flooding.⁷⁵ Floods in 2009 in the northeast of the country killed nearly 1,200 people, affected almost 29,000 households, and led to the loss of more than 35,000 livestock.⁷⁶

Drought can be equally devastating. UNHCR estimates that the majority of internally displaced persons (IDPs) in the country were displaced for one of two reasons – the fighting before and after the fall of the Taliban or the drought in the late 1990s. One example of this is from the provincial capital of Nimroz, Zaranj, where local water stress and lack of potable water compounded the local economic decline that caused the population to fall from 100,000 to 60,000 between 1997 and 2002.⁷⁷



Floods in Ghazni. Afghanistan has one of the highest rates of flood deaths in the world in relation to the population's exposure to floods

The situation is exacerbated by the country's lack of ways to store water (such as check dams) and may be intensified by future climate change. Mean annual temperatures in Afghanistan have been rising at a rate of 0.13°C each decade: a total of 0.6°C since 1960. This is likely to be affecting the extent of snow and rainfall that provides much of Afghanistan's surface water. Indeed, recent figures estimate that rainfall has been falling at a rate of 2 per cent per decade.⁷⁸ As average temperatures rise, shifting rainfall patterns and increases in evaporation will progressively increase the demand for irrigation water. At the same time, the fluctuating weather patterns will change the seasonal behaviour of snow and glacier-fed rivers, increasing the risk of flood and drought-related disasters.⁷⁹

(Re)building water infrastructure without exacerbating community and regional tensions

As part of a national plan to generate hydroelectricity and capture more water, the Afghan government is proposing 31 major infrastructural water projects across the country, including the construction of 15 storage dams at an estimated cost of nearly US\$10 billion. These projects are generating

significant cross-border tensions among Afghanistan's neighbours, who worry about the impact of new dams and irrigation projects on their own water supplies.⁸⁰ In 2011 India's offer to provide support for 12 hydropower projects on the Kabul River was seen to contribute to existing regional tensions over access to water resources.⁸¹

Current work to rehabilitate the Band-e Salma Dam on the Harirod River, which was built in 1976 with support from India but later damaged during the civil war, would reduce water flow to Iran and Turkmenistan during its filling period from 300 million cubic metres (mcm) to 87 mcm per year—a drop of 71 per cent.⁸² This project and others, such as the reconstruction of the Kajakai Dam on the Helmand River, have led to strong diplomatic protests from Iran, which has repeatedly called for negotiations over the Helmand, Farah, and Harirod rivers. According to some observers, Iran is simultaneously attempting to destabilize the region by providing financial support for armed insurgent groups that are directly targeting reconstruction projects such as the Kajakai Dam.⁸³ There were even skirmishes in 2011 after Iranian border guards crossed into Afghanistan to release water from the 30-kilometre Sikhzar canal.⁸⁴



The reconstruction of the Kajakai Dam on the Helmand River has caused tensions with Iran

Table 1. Treaties and negotiations on Afghanistan's transboundary river basins⁸⁵

River basin	Riparian Countries	Treaties with Afghanistan	Recent Initiatives
Aral Sea	Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, Afghanistan, Turkmenistan, China, Pakistan	June 1958: Protocol between the USSR and Afghanistan on the joint utilization of Panj-Amu	In 1992 Kazakhstan, Turkmenistan, Tajikistan, Kyrgyzstan and Uzbekistan signed an agreement that led to the Interstate Coordination Water Commission of Central Asia (ICWC) to address the desiccation of the Aral Sea by negotiating water distribution and quality control. Afghanistan is not a member.
Helmand	Afghanistan, Iran, Pakistan	March 1973: A transboundary water allocation treaty signed between Afghanistan and Iran allowing for a discharge of 22m ³ per second to Iran and permitting the use of a further 4m ³ as a goodwill gesture. Afghanistan promises not to pollute the water to the extent it becomes unusable for agriculture.	For the past three years a joint Afghan and Iranian Helmand River Commissioners Delegation has met quarterly to share information over flood control in the Helmand River. Between 2003 and 2005, in a process facilitated by UNEP, Iran and Afghanistan exchanged information on the Sistan Basin.
Indus (The Kabul river is a tributary to the Indus)	Pakistan, India, China, Afghanistan	None	2003: A 9-member technical committee initiated the drafting of a water sharing treaty with Afghanistan but the document was never completed due to a lack of data. 2006: The World Bank offered to facilitate the negotiation of a new treaty. However, no new dialogue resulted.
Harirod/Murghab	Afghanistan, Turkmenistan, Iran	None	Iran has indicated a readiness to cooperate with the other riparian states but a framework for cooperation has not been developed.

There have been attempts to develop international water treaties with Afghanistan's neighbours (see Table 1), but most of these have progressed slowly and Afghanistan has been excluded from some regional mechanisms. Afghanistan has protested that, given low government capacity, it lacks the expertise and capacity to engage in high-level negotiations with its better-resourced neighbours. However, as the upstream partner to these multiple water sources, Afghanistan's participation in these transboundary management mechanisms is integral to preventing conflict. In a sense there are two levels of vested-interest strategy at play: one version has Afghanistan's neighbours preferring the status-quo to adjusting to Afghanistan's inclusion and thus new (reduced) water allocations; while the second version has Afghanistan preferring the status quo to ending up in a binding agreement that could leave it with less water than it needs in the future. There is a growing risk that Afghanistan's

water-stretched neighbours, unable to negotiate their way to a large share of the water, will find a way to take it. These are tensions that Afghanistan can ill afford.

2.2 Maximising the opportunities for peacebuilding

Water can divide countries and communities, but it can also bind them together.⁸⁶ Managing water resources effectively is critical for Afghanistan's development, security, and stability. Addressing its many water problems requires an integrated approach that spans the rehabilitation of infrastructure, the efficient and sustainable management of water supplies, the protection of water rights, and the establishment of respected and effective regulatory authorities at local, provincial, and national levels. All interventions need to be grounded in a

clear and detailed understanding of the social institutions that determine rights to water, and a careful assessment of the options that are available to improve water management.⁸⁷

I. Reduce competition over scarce water resources

Water scarcity in Afghanistan, for now, is more a problem of inefficiency and poor management than insufficient resources.⁸⁸ Consequently there is much that can be done to 'do more with less' – reducing the demand for water through more efficient irrigation systems, drought-resistant crops, and public awareness campaigns, and increasing the supply of water through water harvesting and infrastructural investments. Meanwhile minimising environmental degradation (for example through reforestation and soil conservation) will reduce the risk of floods and also increase the availability of water.

II. Improve water governance

Interventions need to build provincial- and district-level governance mechanisms to help implement the extensive work that has already been done to improve water governance at a central level. Reforms should continue to address the inequitable access to water for marginalised groups (including women), reduce corruption in the sector, support the community management of water, improve water planning, and build capacity for dispute resolution. River basin planning using integrated water resource management (IWRM) approaches needs to reconcile the competing uses for water and ensure that large-scale mining and hydroelectric investments do not undermine critical community water needs.

III. Prepare for uncertainty

An important dimension of the water 'problem' for Afghanistan is the natural fluctuations in water availability that is predicted to become more extreme as a result of climate change. More data and modelling are needed to understand and prepare for the impact of climate and other human-driven change on the country's water profile. There is a need to improve monitoring systems and databases – the

country needs to plan according to its 'water budget'; to build dynamic models that consider the many uses of water; and to develop policies that can adapt to the altered circumstances that can be expected under climate change scenarios.

IV. Improve transboundary management

Afghanistan is sometimes called Asia's 'water tower' as its snow pack and glacial melt feed into Central and South Asia's river systems. Afghanistan's neighbours have a vested interest in negotiated agreements with Afghanistan over the allocation of transboundary water resources. This interdependence could be used as a platform for closer engagement and peacebuilding in the region. Such initiatives are already underway. For example the Amu Darya Basin Network is a civil society group that provides a platform for information sharing and cooperation.⁸⁹ With the support of the international community, Afghanistan should consider initiating a series of transboundary commissions with its neighbours as formal bodies to negotiate water-sharing agreements, collect and share data and build the confidence and capacity of both sides.

V. Introduce conflict-sensitive approaches

Donors engaged in the water sector need to conduct strategic environmental assessments of the cumulative impact of individual water projects to gauge their effect on local and regional water availability and ensure that extraction rates do not exceed the capacity of the resource to recharge. There have been numerous examples of donor-funded deep wells, causing surrounding shallow wells to dry up, leading to the disruption of local livelihoods and serious disputes over water-use rights.⁹⁰ Donors should systematically include conflict assessments during project planning (see Annex 3) to understand the political dynamics of local water use and pre-empt tensions that may be raised as a result. Finally, donors need to ensure they involve local communities throughout the project cycle and secure their free, prior, and informed consent to those projects.

3. Forests

There are three types of forest in Afghanistan: mixed oak and coniferous forests to the east of the country, an open woodland belt across the centre and north, and irrigated agro-forests in valleys throughout the country where water is available.⁹¹

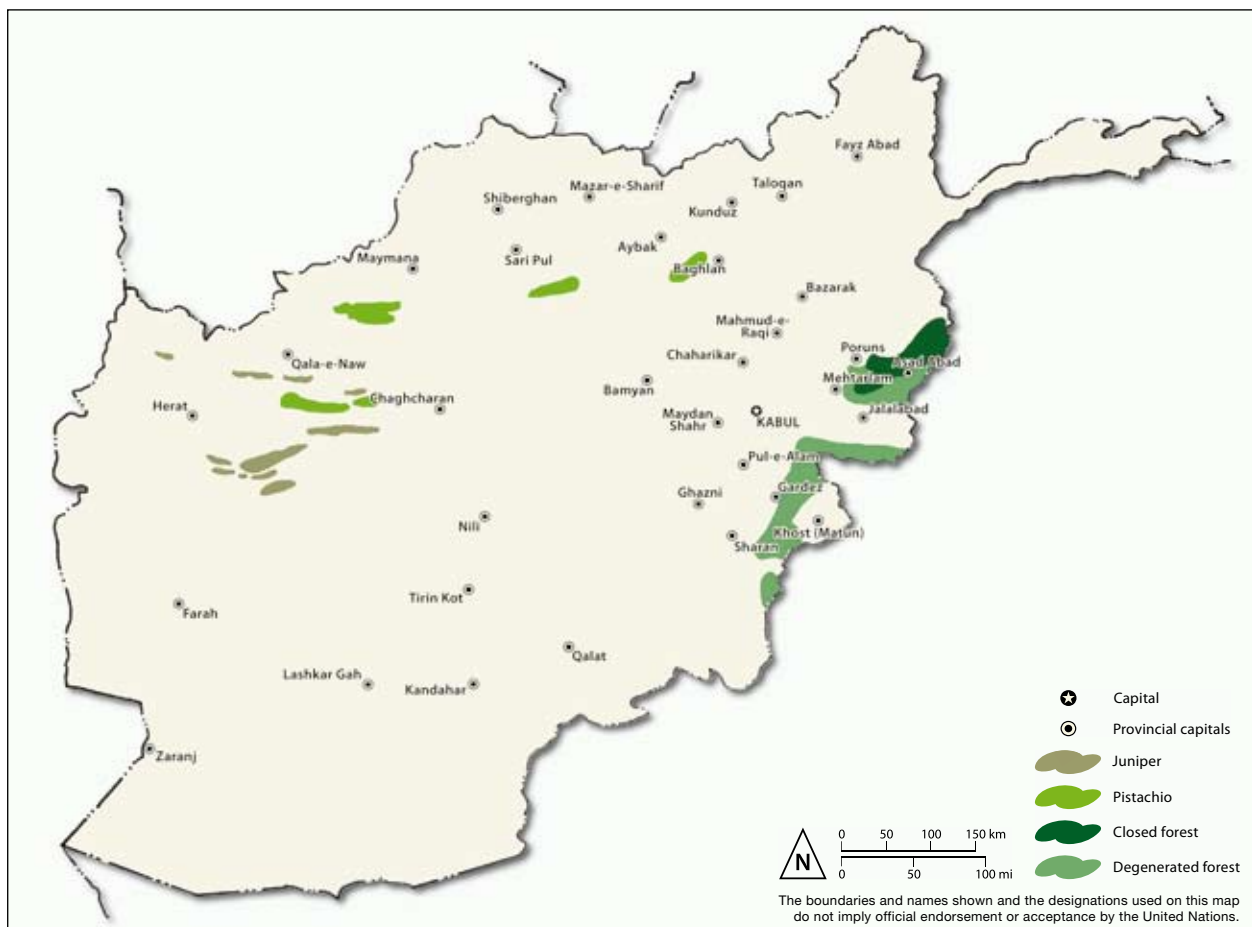
In the 1970s, based on patchy and incomplete evidence, the UN's Food and Agriculture Organization (FAO) concluded that in the nineteenth century there had been as much as one million hectares of oak forest, and two million hectares of coniferous forest (pines and cedar) that would have together covered 4.5 per cent of the country's total land area. In addition to this closed, denser forest, it was estimated that open woodlands of juniper, pistachio, almond and other species once covered 32 million hectares, or 48 per cent of the country.⁹²

3.1 Context and challenges



After water, forests may be Afghanistan's most important renewable resource: forest products (firewood, timber, animal fodder and tree crops) contribute to the livelihoods of millions. Forests provide a range of important ecosystem services. They are a critical source of rural energy, but they also reduce the risk of soil erosion, land degradation, and landslides. Meanwhile, the forestry industry in the eastern part of the country, if managed accountably and sustainably, has the potential to generate much needed-revenue for the government as well as jobs for the local population. One report estimated that the provinces of Kunar, Nangarhar, Laghman and Nuristan could support a sustain-

Map 4. Forested areas in Afghanistan





Bare hillsides near Farkhar District in Takhar Province are all that remains of a former pistachio forest. The past 30 years have seen widespread destruction of previously valuable tree species

able timber industry worth between US\$40 and US\$80 million each year.⁹³

However, instead of providing the basis for a sustainable forestry industry, this area has become the source of a lucrative criminal network that smuggles high-value timber to Pakistan and beyond. The illicit timber economy both draws from and contributes to the insecurity the region is currently experiencing.

Over the past 30 years, near-continuous conflict and the growing demand for timber and firewood have led to steep drops in the country's forests. (An example of the former: pistachio forests were deliberately pulled up by Soviet forces in the 1980s to deny cover to the Mujahedeen fighters.) Poor forest management, compounded by a lack of community involvement and awareness, conversion to agricultural and urban use, and limited investment in reforestation has exacerbated the problem. There is little reliable information on the extent of deforestation and the figures are disputed.⁹⁴ However, the Afghan government's 2008 State of the Environment Report estimated that just two per cent of the country was covered by forests. The report

identified illegal logging as the major factor in their decline and disappearance.⁹⁵

The loss of Afghanistan's forests has economic impacts as well as serious environmental costs. Deforestation, combined with overgrazing, drought, climate change and conflict have led to increased landslides, soil erosion, watershed and land degradation, reduced biodiversity and desertification. Firewood scarcity is acute in the areas of Jalalabad, Laghman, Kabul and Herat.⁹⁶ In the 1970s the northern provinces of Badghis and Takhar earned substantial revenue from their pistachio forests. Yet over the past four decades these forests have almost entirely disappeared, and with them their financial and ecological benefits.⁹⁷

There has been international support for forestry programmes since at least the 1960s and a series of forestry management plans have been developed by the Government of Afghanistan, often with the support of the FAO. The Ministry of Agriculture, Irrigation and Livestock (MAIL) is in charge of forests and rangeland protection through its Natural Resources Directorate. In 2004, President Karzai launched the Green Afghanistan Initiative (GAIN) – a reforestation

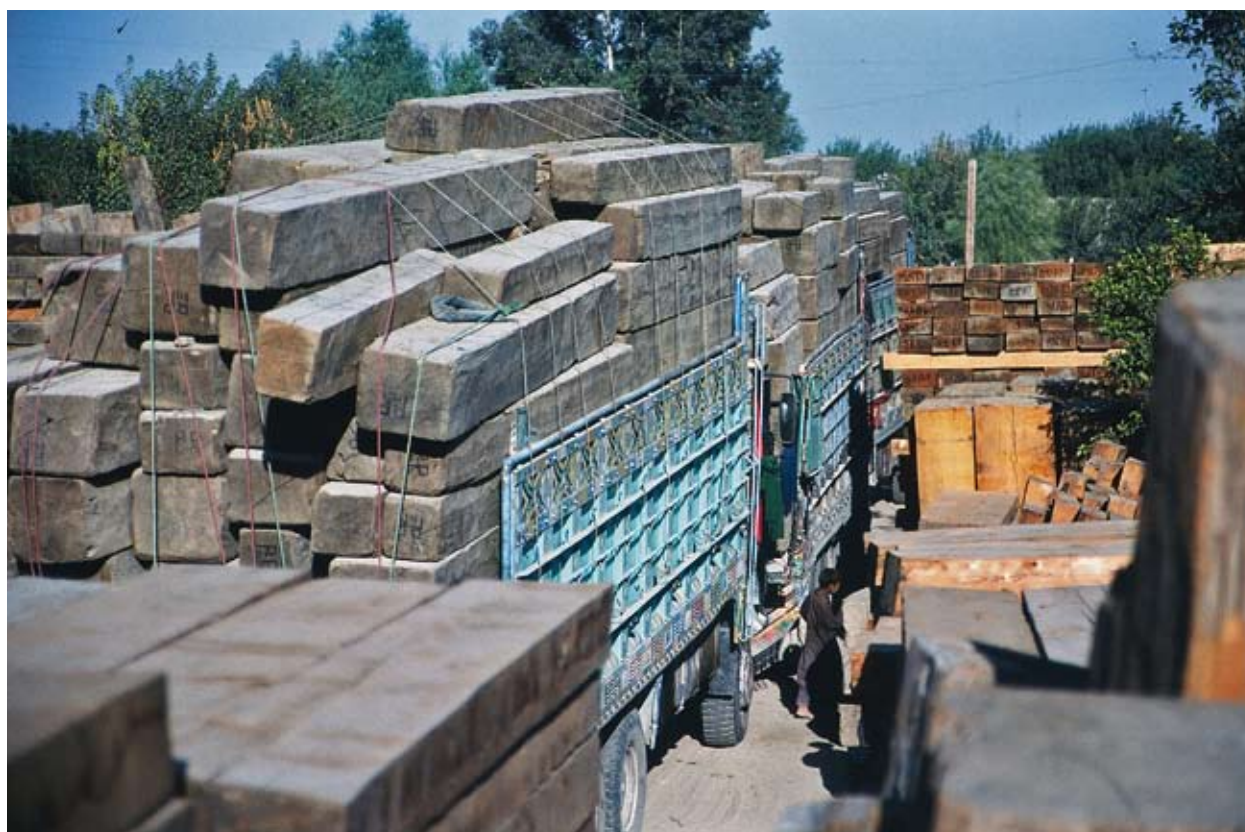
programme that was implemented by the Food and Agriculture Organisation (FAO) in collaboration with the World Food Programme (WFP), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP). A National Forest Policy Implementation Programme was agreed upon in 2006, and in 2011 the National Assembly passed a new Forest Management Law. The law sets out a framework for forest management, including provisions for community management of forests through guidelines and action plans still need to be developed.⁹⁸ One of the major challenges that the new forest regime will need to tackle is the complex, lucrative and highly destabilising smuggling trade in illegal timber from Afghanistan's eastern provinces to Pakistan.

Addressing the illegal timber trade

The largest remaining areas of forest are in the eastern provinces of the country, where rainfall is more consistent and conditions for tree growth are more favourable. The forested areas are found in two patches to the north and the south of the Kabul-Islamabad road in the provinces of Nuristan; Nangarhar and Kunar; and Paktiya, Khost, and Paktika.

There are two distinct economic uses for forests in these regions. At lower altitudes between 1,200m and 2,500m, mixed oak forests predominate. These forests are heavily exploited for firewood, both for local use and for export to Kabul and other urban areas. Between 2,000m and 3,300m, the forest becomes a coniferous mix of cedar, spruce, and pine.⁹⁹ One species in particular, the Himalayan or Deodara cedar, is a durable, high-quality wood used in construction and furniture making.¹⁰⁰ If managed carefully, these areas have the potential to support a commercial logging industry. A recent report estimates the value of standing Deodara cedar in the single province of Kunar as US\$828 million.¹⁰¹

However, this border region is the epicentre of a thriving illegal logging trade. An extensive, complex and profitable operation to smuggle Deodara cedar to Pakistan has developed. It is motivated both by the high-value of the wood and by periodic national bans on logging, which the Afghan government has implemented off-and-on since 2005. This illegal trade is managed by local warlords and cross-border criminal networks; it is made possible by local insecurity, the region's rugged terrain, and the absence of government control.¹⁰²



A valuable smuggling industry has developed to export high-value deodar cedar from the Eastern forests of Afghanistan through Pakistan to the Gulf States

Until 2010 the trade was dominated and, in effect, regulated, by two local commanders who were independent of both the insurgency and the government. The high cost of extraction and limited technologies meant that only the best-quality trees were chosen. This resulted in a form of selective logging that, by chance, resembled responsible forestry.¹⁰³ While these commanders were by no means pro-government, the Government seemed to tolerate the smuggling partly out of recognition that it could not realistically impose a timber ban, and also because leaving it to the commanders ensured that revenue did not fall directly into insurgent hands.¹⁰⁴

In 2010 the more powerful of the two warlords was assassinated leaving the trade open to insurgent takeover, who see the timber trade as a viable and valuable source of income. Since the insurgent takeover, there has been a dramatic increase in clear-cutting using chainsaws, with community 'consent' either being coerced or bought with left-over timber.¹⁰⁵

The illegal timber trade, though geographically limited, plays a destructive role in on-going instability in these provinces: It creates a shadow conflict econ-

omy that reaches across the border into Pakistan, while providing incentives for the powerful groups that profit from the trade to perpetuate instability and spoil peacebuilding initiatives. Meanwhile, as forest resources decline and tensions rise as a result of increased deforestation, the illicit timber trade is also eroding relationships between communities, as rivals realign their loyalties to exploit relationships with better-armed insurgents.

In essence, illegal timber smuggling from the east of the country to Pakistan is another strand in Afghanistan's complex and multi-faceted criminalised war-economy (alongside drugs (see section 5) and smuggled gemstones (see section 6)) that helps to explain the poor governance, regional criminal networks and corruption that continue to present major challenges to peace and stability in Afghanistan.

3.2 Maximising the opportunities for peacebuilding

Afghanistan's forest sector faces two quite distinct challenges: (1) reducing the rate of deforestation for firewood and (2) combating the illegal trade in high-value wood.

I. Reducing deforestation and mitigating competition for firewood

Addressing the balance of supply and demand for firewood will alleviate the pressure on Afghanistan's forests as a fuel source. Planting woodlots and involving communities more closely in the management of their local forests would increase supply, but all too often on-going land disputes have to be resolved – or land ownership has to be clarified – before that can happen. If communities are unsure they own the land, they will have little incentive to protect it. Meanwhile, promoting alternative fuel sources and efficient cook stoves would help to reduce demand for firewood.

Finally, the National Environmental Protection Agency (NEPA), UNEP and FAO among others need to raise awareness among decision makers in government and the international community of the multiple benefits of sustainable forestry management for disaster reduction, soil conservation and livelihood generation to encourage decision



© COAM

Fuel-efficient cook stoves are part of the answer to reducing the overall demand for fuelwood and consequent deforestation



Firewood for heating and cooking is a critical resource for rural and urban Afghanistan

makers involved in development programme and rural reconstruction to incorporate those goals into their strategies.

II. Comprehensive approaches to removing Afghan conflict timber from international markets

Addressing the illegal trade in high-value timber requires a different set of responses. Timber from eastern Afghanistan has become a classic 'conflict resource' in much the same way as diamonds were in Sierra Leone and timber was in Liberia, Cambodia, and Myanmar. Removing such conflict resources from international markets is complex and will need well-directed and committed international attention. A first step is to raise awareness of the impacts of the trade in Afghanistan, Pakistan and Gulf states, which are the destination for much of the timber. A second step is to develop an agreement or mechanism between Afghani-

stan and Pakistan to coordinate action on timber smuggling. Future steps, which seem unfeasible for the moment, might be to consider some kind of certification scheme that provides an incentive and a price premium for the production of sustainable timber and moves communities away from alliances with the insurgents.

III. Improving border and customs enforcement

The smuggling of illegal timber is made possible by the highly porous borders along Afghanistan's eastern frontier with Pakistan. Expanding and strengthening the border posts would make it more difficult for the smugglers to move their product across the borders. Clearly it is much harder for Afghanistan to secure its borders unilaterally, and so there need to be greater efforts to bring Pakistan into a joint approach to reduce the transboundary movement of illegal timber.

4. Drugs

Afghanistan's drug economy is a pervasive and potent challenge to the country's stability. Afghanistan is the world's largest producer of opium (generating roughly 90 per cent of global supply every year since 2002) and the leading producer of cannabis resin, or hashish, producing between 1,500 and 3,500 tonnes a year.¹⁰⁶

It has also become the global centre of heroin production. Roughly two-thirds of the harvested opium is converted to morphine or heroin inside the country by an estimated 300 to 500 laboratories that manufacture between 380 and 400 tonnes of heroin each year.¹⁰⁷ At its heart, the drug economy is a consequence of distorted natural resource management – the use to which rural land and water resources are put, and the livelihood options available to rural communities.

Although rarely framed as a natural resource management problem, poppy constitutes a crop like any

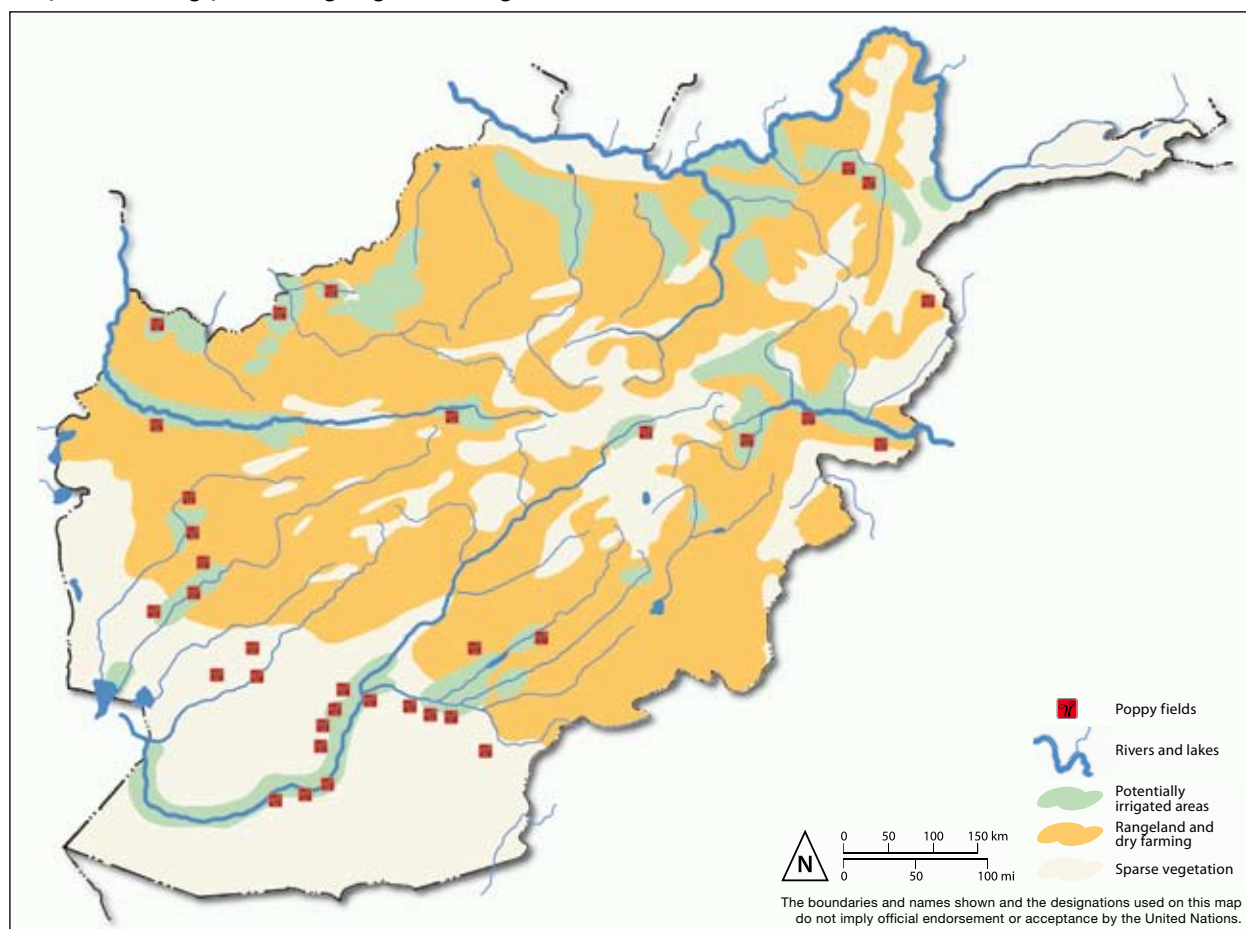


other. Poppy production requires less water than the production of wheat and provides roughly three times the income per hectare; in insecure areas it can be one of the few profitable options open to rural farmers. Insecurity and poor transport links can make markets for basic agricultural products difficult or impossible to access; the need to pay bribes or 'taxes' at repeated roadblocks elevates transport costs. Opium is a profitable, easily transported product that middle men can purchase directly from the farm and that can also be used as a means of securing pre-harvest loans.

4.1 Context and challenges

The drug trade developed over the past 40 years with the growth of the smuggling trade in the 1970s,

Map 5. Drug producing regions of Afghanistan





© UN PHOTO / UNODC / ZALWA

Afghanistan produces 90 per cent of the world's opium

as well as the 1980s 'guns-in-drugs-out' pipeline, and regionalisation of politico-military groups. From 2000-2001 a Taliban ban on poppy cultivation led to a steep, albeit temporary, drop in opium production. But production has increased significantly since the overthrow of the Taliban regime.

Poppies and hashish are simultaneously conflict goods, illicit commodities and a means of survival for many Afghan people. Financially speaking, the drug trade has become one of the main pillars of the Afghan economy: The trade in opiates accounts for an estimated 16 per cent of Afghanistan's GDP: 191,000 households, or five per cent of the population, are involved in drug production; and loans on the basis of future opium production are an important source of micro-credit in a country where banking services reach only a tiny fraction of the population.¹⁰⁸ In 2011, the total land area under poppy cultivation was around 131,000 hectares – an increase of seven per cent on the previous year.¹⁰⁹ Meanwhile, the number of poppy-free provinces declined from 20 in 2010 to 17 in 2011.¹¹⁰

Opium production fluctuates due to a number of factors: the intensity of eradication programmes; the extent of the insurgency; the price of competing agricultural products such as wheat (low prices

encourage production of the higher value opium); food security (concerns over food security encourage farmers to switch back to wheat); and the productivity of the crop (which is affected by periodic drought and disease).¹¹¹ Because the most valuable markets for drugs are outside Afghanistan, the drug economy relies on being able to move its product across the country's porous borders. However, illicit drug use is not just a problem for distant countries. Rapidly increasing domestic drug use is laying a heavy burden on Afghanistan itself. There are now one million drug users in Afghanistan, and there is a concentrated HIV/AIDS epidemic among users of injection drugs.¹¹²

Insecurity and the drug trade are mutually reinforcing. The Afghan drug trade is a contributing factor to the insurgency, generating revenues in the hundreds of millions of dollars. That money serves two important functions: it pays the operational expenses of insurgents and it creates incentives for poor governance. The Taliban and other anti-government elements raise money from the drug trade through direct involvement, taxing shipments, or demanding protection money from farmers and heroin laboratories.¹¹³ The UNODC estimates that in 2009 the Taliban earned \$155 million from the drug trade, the traffickers \$2.2 billion, and Afghan farmers \$440 million.¹¹⁴

Drugs are also a product of insecurity, thriving in the security vacuum that the insurgency creates. The close link between insecurity and the drug trade can be mapped out geographically. UNODC estimates that in 2011, 95 per cent of total cultivation took place in nine provinces in the Southern and Western regions, including some of the districts where the insurgency is strongest and the reach of government is most weak.¹¹⁵ Insecurity enables farmers to cultivate poppies with less fear of eradication; it also creates an environment in which opium production may be one of the few livelihood options they have. In some parts of today's Afghanistan, the crop represents a 'low-risk strategy for a high-risk setting.'¹¹⁶

The narcotics trade also exacerbates the challenges that Afghanistan faces over other natural resources. Many of the factors that enable drug production—insecurity, criminal networks, porous borders and poverty—also encourage and facilitate the exploitation and extraction of other natural resources such as timber (section 4), gemstones (section 6) and high-value wildlife products. Criminal networks with established smuggling routes can switch between different types of resources as supplies and the market dictate. In areas controlled by the insurgency, poppy production, natural resource exploitation, and smuggling all increase, setting in motion a mutually reinforcing situation of increased illegal natural resource trade.

Drug production in Afghanistan has built a powerful shadow narco-economy that provides significant revenues for traffickers and some insurgents and has contributed to pervasive corruption throughout many levels of government. The narco-economy has been a feature of Afghanistan for many years and elements of it have become embedded in the political and social structure of the country. The political and economic actors who have a vested interest in the perpetuation of the shadow economy – and the insecurity that feeds it – are also potentially powerful spoilers of peace and stability in Afghanistan.¹¹⁷

4.2 Maximising the opportunities for peacebuilding

Finding ways to reduce the flow of drugs has been a major preoccupation of the international community. But despite many years of effort, drug cultivation in Afghanistan has expanded as the insurgency

has gathered pace. The reality of drug cultivation in Afghanistan has created a complex and lethal knot of links between the illicit drug economy, weak governance, corruption, insecurity, and the local health impacts of addiction.

The illicit drug trade has distorted politics, increased corruption, and criminalised a section of the population and the economy. Afghanistan's opium economy grew as a consequence of the degradation of agriculture and economic infrastructure from decades of war, the failure of the state, and the acceptance of opium as a means of survival. Efforts to reverse its effects should focus on the problems that created it. The timing of such interventions will be crucial, as will the adoption of a regional approach.

The illegal opium economy is an evolving system whose various dimensions and dynamics must be tackled through a careful approach that integrates risks, incentives and feedback effects, what the UNODC has advocated as a 'balanced approach.' UNODC has developed a programme with four areas of focus: (1) research, policy and advocacy; (2) law enforcement capacity building; (3) criminal justice; and (4) health and livelihoods.¹¹⁸ The UNODC experience suggests that three considerations are particularly important when looking at how better natural resource management could contribute both to tackling the drug trade and supporting peacebuilding.

I. Develop comprehensive approaches

The counter-narcotics strategy needs to be comprehensive, striking a balance between law enforcement, alternative livelihoods, and activities to reduce demand in destination countries. Eradication, which is carried out by the government, has to be accompanied by stricter border controls as well as the provision of alternative livelihoods to ensure that farmers can move away from the production of opium and cannabis.

Sufficient and sustained political will is critical to the success of any strategy to reduce the opium trade and the international community needs to sustain its support to help the Afghan government put in place the strategies necessary to address the narco-economy.



Alternative livelihoods programmes need to accompany eradication programmes to avoid alienating poppy producing communities

II. Support alternative livelihoods in poppy producing areas

Counter-narcotics policy must distinguish between different parts of the illicit drug economy. In many of the major production areas, some farmers have the option not to grow poppy; in other areas, households are highly dependent on poppy production for survival. Meanwhile, many itinerant workers have come to depend on the seasonal income from weeding or harvesting poppy as their sole employment option.¹¹⁹

One recent study argued that eradication was most viable in communities close to urban centres where there are alternative livelihood options. The study also found that eradication was least sustainable without alternative livelihood options, and nearly impossible where opium production has provided the means to own and cultivate the land.¹²⁰

Where communities are heavily dependent on opium production, bans and eradication programmes – if carried out without providing alternative sources of income – can alienate rural farmers and push them further into poverty. Consequently there is a need to focus development assistance

on diversifying livelihoods. A detailed understanding of the local social, economic, political and environmental context should form the foundation of any eradication initiative.¹²¹ Long-term alternative livelihoods programmes will need to look at issues such as re-establishing a sustainable rural economy based around credit schemes for farmers and sources of income for landless labourers.

III. Look for opportunities for transboundary collaboration

Afghanistan cannot deal with the challenge of narco-trafficking alone. Countries bordering Afghanistan are becoming increasingly aware of the cross-border threat of the organised crime and drug trafficking and see the heavy cost of drug use in their own societies. Iran, for example, has one of the largest opiate-using populations, with an estimated 3 million users.¹²² These countries need to be more aware of their own responsibilities when it comes to addressing the movement of drugs or precursor chemicals through their borders. In the same way as other natural resources issues can bind or divide countries, tackling the drug trade presents an opportunity for more concerted regional action (see Box 2).

Box 2. Regional Cooperation in the Heart of Asia

Afghanistan, the Republic of Azerbaijan, the People's Republic of China, the Republic of India, the Islamic Republic of Iran, the Republic of Kazakhstan, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Kingdom of Saudi Arabia, the Republic of Tajikistan, the Republic of Turkey, Turkmenistan, the United Arab Emirates and Uzbekistan) launched a process of regional security cooperation. In so doing they resurrected the idea of regional cooperation that has been much discussed since the 2001 Bonn Conference but had produced little in the way of tangible outcomes.¹²³

Known initially as the "Istanbul process" and since renamed "the Heart of Asia Process", the initiative aims to build a sense of regional collaboration in which shared concerns are addressed multilaterally, rather than in closed, bilateral discussions. In so doing, it aims to enhance regional political dialogue, develop synergies between regional organisations, and progressively build confidence among the countries.

At a second meeting in June 2012 the conference narrowed a long list of 42 sectors down to the seven confidence-building measures (CBM) that would be the initial focus of efforts toward greater cooperation: (1) disaster risk reduction, (2) counter-terrorism, (3) counter-narcotics, (4) commercial opportunities, (5) chambers of commerce, (6) education and (7) regional infrastructure, with individual countries volunteering to lead or co-lead the discussion on how shared challenges in each of the sectors can be addressed. Many of these CBMs have strong natural resource dimensions: the CBM on commercial opportunities, for example, relates closely to Afghanistan's plans for its mineral sector, while the CBM on counter-narcotics aims to develop regional cooperation to address the drugs trade.

It is too early to predict how the process will develop. Depending on the commitment of participating nations it could stall, or grow into a standing mechanism for regional cooperation. Western nations, which attend as 'supporting countries,' expressed hope that a regional strategy will help to build wider stability for Afghanistan during and after the transition, while other countries are cautious about creating a new mechanism.¹²⁴ There are daunting political challenges to overcome in the form of the often apparently incompatible interests of the participants, but this process provides a platform to address some of environmental and natural resource challenges facing the region.

5. Extractives

As a result of its complex geological history, Afghanistan hosts a rich variety of subsurface resources, including precious and semi-precious gemstones (emeralds, rubies, sapphires and lapis lazuli), uranium, common metals (copper, lead, chromite and iron), rare-earth metals (such as lithium and niobium) and precious metals such as gold and silver. It also holds potentially valuable reserves of fossil fuels in the form of gas, oil, and coal. Afghanistan's location also makes it a strategic transit route for natural gas: in 2008 a framework agreement was signed to construct the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline to export gas from Central Asia to South Asia (see Box 3).

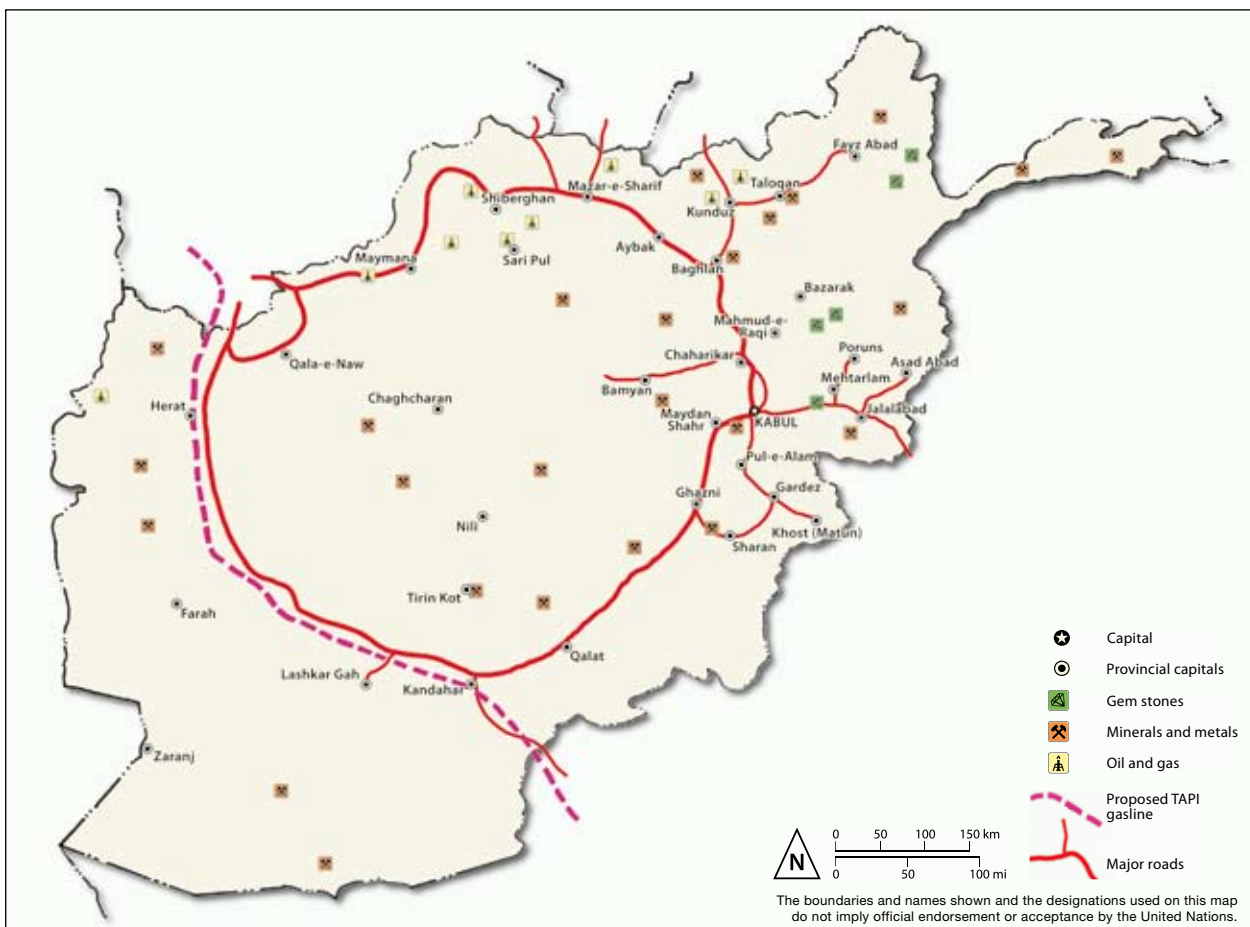
Although mining has been taking place in Afghanistan for over six thousand years, only ten per cent of the country has been assessed by detailed

geological surveys and much of its potential remains unexplored. Nevertheless, a June 2010 survey by the US estimated the value of the country's geological resources at one trillion dollars. Other estimates have reached the staggeringly high figure of three trillion dollars.¹²⁵

It is no exaggeration to say that the country's medium- to long-term economic prospects rest on whether these resources can be extracted in a responsible, transparent manner for the benefit of all Afghans. At the moment, given the prevailing security situation and the potential risks of mismanagement of exploration and extraction, some question whether the Afghan government should be pushing ahead with mining at all.¹²⁶



Map 6. Mineral availability in Afghanistan



5.1 Context and challenges

Developing the country's mineral resources is a strategic priority for the Government of Afghanistan and the international community, who see the sector as an engine for growth and the best hope for Afghanistan becoming fiscally self-sufficient in the medium term. But there are huge challenges for such capital-intensive investments in the country. Afghanistan's mountainous terrain and land-locked location makes exporting large quantities of raw materials very expensive, and reliant on the cooperation of neighbours with whom Afghanistan has had often had turbulent relationships.

The almost complete absence of infrastructural investment over the past four decades means that a transportation network needs to be built from scratch. The World Bank estimates that "a major mine developed in the country will have some of the longest lead times, capital requirements, and highest operating costs of any global investment."¹²⁷ Nevertheless, several large new concessions have been tendered, and oil and gas wells are being redeveloped.

But the mining sector can be a doubled-edged sword. On the one, hand it can create jobs, generate revenue, and fund infrastructure. But on the other, the presence of rich mineral resources can be a 'curse' that breeds corruption and bad governance, stunts economic growth, antagonises historical resentments, and causes new environmental, human rights, and social problems.

Furthermore, there is a history of mining revenues in Afghanistan funding local warlords and insurgent groups. The former leader of the Northern Alliance, Ahmad Shah Massoud, reportedly funded his anti-Soviet campaign in the Panjshir valley in the 1980s by imposing a tax on the mining of emeralds and lapis lazuli. By the 1990s, the Northern Alliance relied on this trade for more than 50 per cent of their budget as they fought to repel the advancing Taliban.¹²⁸ Since then there have been violent confrontations over control of the lapis trade between different commanders and warlords (notably in 2008-9 and 2011-2).

A 2012 report for the US Defence Department argued that criminal gangs were smuggling chromite across the border to Pakistan, paying protection money to the Haqqani network and the Pakistani Taliban.¹²⁹

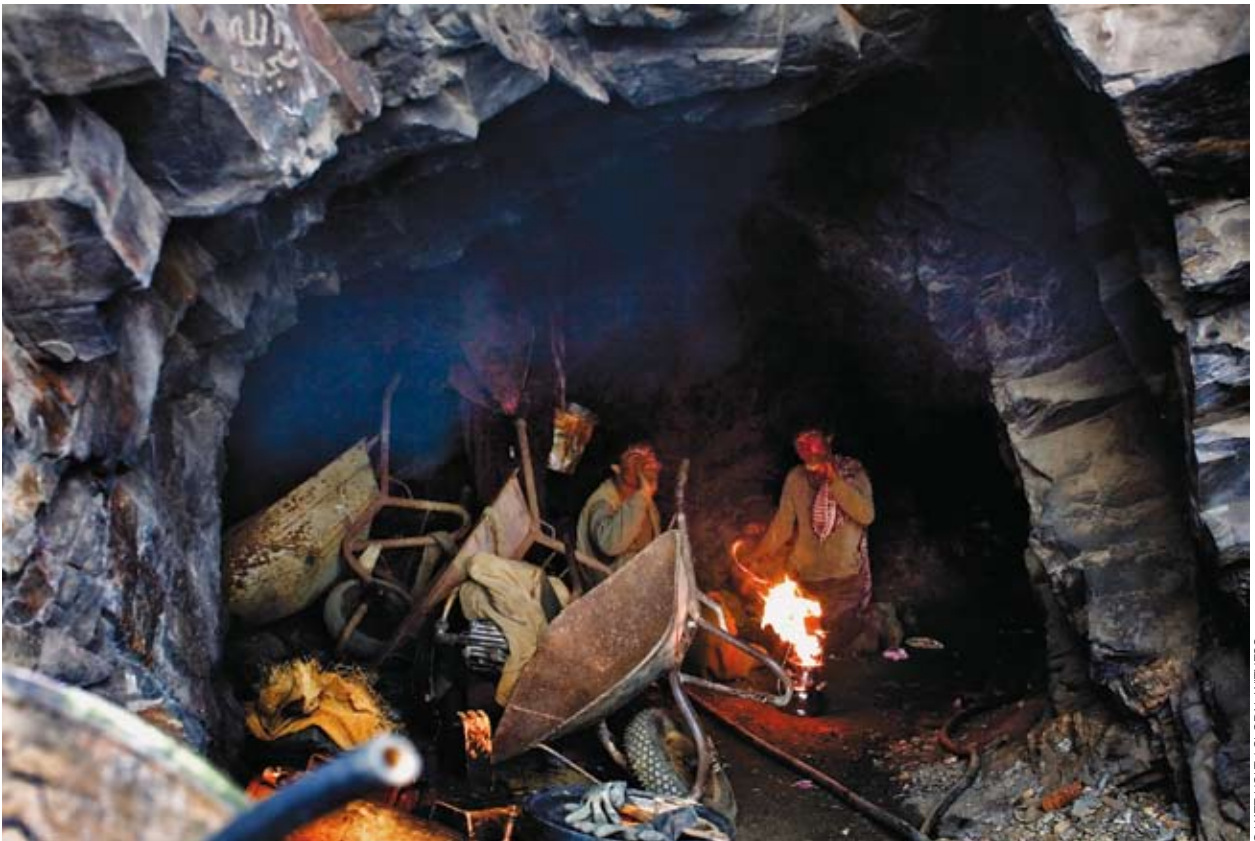
Given the deteriorating security situation in Afghanistan and the widely dispersed reserves of high-value mineral resources, the rapid expansion of mining could prolong and complicate the war economy in Afghanistan, as well as open the country to greater exploitation by foreign interests.

New mining operations

Afghanistan has a number of increasingly dilapidated operations that have been extracting coal and gas for decades, as well as mines for precious and semi-precious stones in Badakhshan and Panjshir. But the government, mindful of the mining sector's potentially lucrative revenues, has made the development of the sector a strategic priority. As of the end of 2012, 212 contracts have already been signed,¹³⁰ leading to concerns from local and international NGOs that this represents an ill-prepared rush to develop the sector. They argue that an overly hasty expansion of the mining sector in advance of the 2014 transition risks exacerbating corruption and causing serious environmental and social impacts.¹³¹ Such a rush to begin mining puts more focus on signing deals than putting the proper governance systems in place; a hasty process could leave Afghanistan in a weak negotiating position with international companies.

Two major contracts have attracted particular attention. The first is a 2008 agreement signed with a Chinese state-owned company, the Metallurgical Corporation of China (MCC) to develop the country's largest copper deposit at the Aynak mine, 30 kilometres to the south of Kabul. Containing an estimated 11.3 million tonnes of copper valued at \$88 billion the Aynak deposit is one of the largest in the world. Development of the mine so far has been slowed by the discovery of an ancient archaeological site, by difficulties in developing the necessary infrastructure, and by concerns over security. Nevertheless, officials say that they 'hope' production will begin in 2014 to 2016.¹³²

The second is an agreement to develop a world-class deposit of between 1.8 billion and 2.05 billion tonnes of iron ore at the Hajigak mine on the border between Bamiyan and Wardak provinces, 100 kilometres west of Kabul.¹³³ Signed by a consortium of seven Indian companies and led by the state-owned steel company the Steel Authority of India (SAI), the consortium promised to invest \$11 billion in Afghanistan to



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Artisanal gemstone miners look out from a crude mine in the Panjshir valley

develop the mine, construct a power plant and railway, and build a steel plant capable of processing 6 million tonnes of steel per year.¹³⁴ This contract comes hard on the heels of a strategic partnership on security, trade and cultural issues signed between India and Afghanistan the same year. It reflects a conscious decision on the part of India to develop a broader Indian presence in Afghanistan.¹³⁵ However, the investment has set off alarm bells in Pakistan, where officials fear that it is part of a wider move by its old rival India to reduce Pakistan's influence in Afghanistan.¹³⁶ Similarly, the Chinese investment in Aynak seems to be part of a broader geo-strategic move, which includes a 'Strategic and Cooperation Partnership' and Chinese support for Afghan observer status at the Shanghai Cooperation Organization (SCO), a grouping of Central Asian countries with Russia and China that works to improve regional cooperation.¹³⁷

In December 2011 the Afghan government signalled its intention to continue developing the mineral sector by starting tendering processes for four large copper and gold concessions in Herat, Sar-e-Pul, Ghazni and Badakhshan. It also signed its first international oil production agreement in decades by signing an agreement with the China National Petroleum

Corporation (CNPC) to develop oil blocks in the provinces of Sar-e-Pul and Faryab.¹³⁸ The World Bank estimates that the revenue from mines will average US\$322 million a year between 2011 and 2015, mostly from signing bonuses and so on, rising to an average of US\$900 million a year by 2031.¹³⁹

Reform of the mining sector

The government has set out its vision for the mineral sector in two key documents—the Oil, Gas and Mining Sector Vision and the National Extractive Industries Excellence Programme. Together these documents outline a strategy that the government hopes will generate revenues (the Ministry of Mines has estimated that mineral extraction will provide between 42 and 45 per cent of Afghanistan's GDP by 2024), create jobs, reduce reliance on international aid and help to diversify and grow Afghanistan's economy.¹⁴⁰ In 2009 the Government endorsed the Extractive Industries Transparency Initiative (EITI – a multi-stakeholder initiative that brings together governments, companies and civil society to increase publicly accessible information about the payments that mining companies make to governments).¹⁴¹ Afghanistan became an EITI candidate country in 2010.

Box 3. Pipeline politics in Central Asia

The TAPI pipeline (named for the four countries it proposes to link: Turkmenistan-Afghanistan-Pakistan-India) would export natural gas from Turkmenistan's huge gas fields through Afghanistan to Pakistan and India.

Discussed for over 20 years and priced at US\$7.6 billion in 2008, the 1,735-kilometre pipeline aims to deliver more than 30 billion cubic metres of natural gas per year to South Asia's energy-hungry markets, earning Afghanistan an estimated US\$450 million a year in transit fees alone.

The project would also have far-reaching geopolitical implications: diminishing Russia's dominance over Central Asia's gas exports; cementing Afghanistan's strategic significance as an energy transit point; and arguably increasing the region's stake in Afghan stability.

Construction was originally slated to begin in 2010. However, while the Turkmen government has said it expects to start building its section in 2017, it seems that the project has effectively stalled due to doubts over whether Afghanistan will buy its share of the gas and as a result of increasing instability in Afghanistan: the proposed route through Herat and Kandahar crosses some of Afghanistan's most unstable provinces.

The Government has also endeavoured to create a legal and institutional framework for environmental protection and the sustainable use of natural resources by passing the National Environmental Protection Act in 2005 and creating the National Environmental Protection Agency (NEPA) which bears responsibility for setting environmental policy and monitoring environmental performance. The World Bank and other donors are supporting the Government to develop its mining sector with the Second Sustainable Development of Natural Resources Project, worth US\$52 million dollars for the five years to 2016, which will help to revise the sector's regulatory structure.¹⁴²

Meanwhile, the Government has made strong commitments to better governance and transparency of the mining sector at the December 2011 Bonn conference and July 2012 Tokyo conference and in the Strategic Partnership Agreement signed with the US in April 2012. In July 2012 President Karzai signed a decree ordering that all contracts signed with international and national companies in the last three years should be published in full. While the progress is encouraging there is much to do to ensure that the rhetoric is translated into reality on the ground.

5.2 Maximising the opportunities for peacebuilding

How these resources are managed will play a big role in the country's stability in future. The country's extractive resources present a huge opportunity for Afghanistan to grow its economy, create jobs and

reduce its dependence on international development aid. But the investments that are being made now will continue to impact the country for decades so it is critical that the right structures are put in place as soon as possible.

Developing a successful extractives sector that does not create or exacerbate conflict relies on the Government being able to address four core challenges: minimising the negative social, human rights and environmental impacts of mining; ensuring mining benefits all Afghans by managing revenue effectively and diversifying the economy; strengthening transparency and accountability to reduce corruption and providing responsible security around mine sites.

I. Minimise negative social and environmental impacts

Mining is tied to, and can impact, many of the natural resource challenges already discussed in this report, particularly those relating to land and water. Mining, and mine-related infrastructure like roads and railways, require extensive land, often affect significant quantities of water and can generate large volumes of toxic waste if not properly managed, presenting serious health risks and damaging other livelihoods such as farming.

In each case, the Afghan government needs to calculate and address the environmental and social costs of mining to ensure they do not outweigh the financial gains. The government also needs to clarify roles and responsibilities for the mitigation of

environmental and social risks of mining between the Ministry of Mining and NEPA.

The government should ensure that all projects are subject to open, independent environmental impact assessment processes, and that mining companies adhere to best practice international standards for environmental and social protection. These include commitments for relocation and compensation for local communities, environmental management practices in and around mine sites as well as remediation and mine closure.

Given that the informed participation of local populations and civil society groups is one of the best ways of both avoiding future conflict and improving oversight of mining operations, and that the 2007 Environment Law expressly requires it¹⁴³, the government should endeavour to ensure meaningful participation by local communities in decisions over mining, encourage company-community engagement and develop mechanisms to raise and settle grievances (The Government is setting up a grievance system for the Aynak mine but it is not clear what steps will be taken to ensure that it is effective and has the confidence of the local communities).

The international community, meanwhile, can support the government and particularly NEPA staff, to assess the environmental impacts of mining operations and improve their licensing, monitoring and enforcement capacities. The international community also needs to provide support to the civil society groups that can help local communities understand the facts about mining and represent their own concerns.

II. Ensure benefits for all Afghans

The challenge is to ensure that mining development meets benefits all Afghans and not just powerful elites, and that revenues are collected and spent effectively in ways that maximise economic growth in Afghanistan. The failure to achieve this could lead to a growing loss of trust in government and the possibility of violence from disgruntled groups.

Greater community involvement in the development of mine management plans, relocation and mine closure programmes will help community members understand the potential costs and benefits of mining and set realistic expectations. Meanwhile, long-term investment in developing

Afghanistan's technical skills and local content requirements in mining contracts will ensure that Afghans can be employed in more technical positions. Ultimately, the Afghan government needs to ensure that the mining sector becomes a 'lever' to promote diversification of the economy by providing services to the mines and adding value to their products so that the sector broadens Afghanistan's economy and promotes greater job creation.

Revenue management mechanisms, such as an independently monitored and audited resource revenue fund and appropriate and timely distribution of mining revenues from central to provincial authorities, will help to increase government revenues from mining, utilise mining revenues more effectively, and increase trust in government.

III. Strengthen transparency and accountability to improve governance and tackle corruption

The importance of mining to Afghanistan's future means that it is critical that the management of the sector is efficient and impartial. In many countries the process of awarding mining concessions has become prone to corruption and political manipulation. This is a particular concern in Afghanistan given that the country already ranks joint last in the 2012 Global Corruption Perceptions Index, alongside Somalia and North Korea.

To reduce the chances and allegations of corruption the government should consider setting up an impartial panel to allocate mining contracts based on a range of considerations: for example the revenue generated, the social and environmental safeguards offered by the company and so on.

Elsewhere, the transparent management of mining revenues has proven to be an effective remedy for corruption. Afghanistan is a candidate country for the Extractive Industries Transparency Initiative (EITI) and should endeavour to become fully compliant as soon as possible. The international community should provide concerted support to ensure this happens.

But EITI alone—transparency of payments—is not enough. Transparency should be improved along the entire 'supply chain' of mineral extraction - from the initial tender, to the awarding of related supply and infrastructure contracts, to the spending of roy-

alties. The Afghan public have a right to understand the deals that have been signed on their behalf, to see who is benefiting from those deals and to grasp the potential environmental and social implications of the mining operations.

In particular the government should make information public on each concession, provide the rules and regulations for mining licenses and concessions in a public database and release regular reports on the contributions of the mining sector to the national exchequer. The Government should also encourage the open and independent monitoring of mining operations and release details of how the revenue is being spent.

IV. Provide responsible security around mines

With the security situation in many part of the country deteriorating and the withdrawal of international troops imminent, mine operators in Afghanistan face a difficult operating environment. A US-based monitoring group reported in June 2010 that the Taliban has threatened to target any company involved in mining, claiming that President Karzai's government has no legitimate right to issue mining concessions.¹⁴⁴ At Aynak there have already been reports of rocket attacks on the consortium's camp.

Mindful of the potential impact of insecurity curbing mining investment the Afghan Government

has announced the creation of a 7,000-strong special Mines Protection Unit (MPU) as part of the Afghan National Security Forces (ANSF). Meanwhile a reported 1,500 Afghan National Police (ANP) officers have been assigned to the Aynak project on a permanent basis – nearly twice as many as are in the rest of the Logar province. Another 1,700 ANP officers will be located at the Hajigak mine. In addition mine operators will likely have their own security arrangements.

There are a number of risks associated with mine security including the increased likelihood of mines becoming a target for attack and security forces becoming involved in human rights abuses or the illicit trade in conflict resources. At Aynak the company and government have committed to apply the Voluntary Principles on Security and Human Rights (developed in 2000 as part of a company-government-NGO process to provide extractive companies with an operating framework that respects human rights¹⁴⁵).

The Afghan government needs to ensure that policies to protect mine operations and their personnel reflect recognised international best practice (such as through the Voluntary Principles on Security and Human rights) and carefully guard against human rights abuses. The government should also establish an independent mechanism to monitor the origins, sources, and intensity of violence around extractive operations.

Conclusions

Although the dynamics are complex, five broad links emerge in which natural resources play a role in conflict in Afghanistan:

- I. **Scarce livelihood resources:** Vital livelihood resources such as land and irrigation water are a source of competition. Given that traditional systems of dispute resolution are weak and the government's ability to intercede is limited, these disputes can turn violent.
- II. **Instruments of coercion or influence:** Powerful stakeholders can and do use resources such as land and water to exert control over others. This is the case for stakeholders with absolute power, such as commanders and wealthy elites, but also for groups with relative power, such as upstream farmers controlling access to irrigation water for downstream communities.
- III. **A source of illicit revenues:** The illicit trade in timber, drugs and gemstones has built a powerful shadow economy that contributes to the criminalisation of the economy and sustains serious corruption.
- IV. **Incentives for peace spoilers:** The profits from smuggling timber, gems, and drugs create groups that have a vested interest in continued insecurity in Afghanistan. At a regional level, some countries may see their interests for certain resources, such as water, best served by a continuation of the security vacuum that delays the construction of infrastructure like dams. This undermines collective action at all levels for peacebuilding in Afghanistan.
- V. **A source of grievance:** Local grievances have centred on the following issues: Land or water grabs by elites, communities that suffer the negative impacts of natural resource exploitation without seeing the benefits, and corruption in the management of natural resources. These grievances both delegitimize the government and provide opportunities for anti-government elements to buttress their position by resolving such disputes.

If current trends persist, these challenges are likely to intensify in the coming years. Population growth and environmental degradation will continue to reduce the availability of productive land and clean water; industrial mining activity is set to expand rapidly; and new dam projects on the Kunar, Helmand, and Amu Darya rivers will affect the availability of transboundary water for Afghanistan's neighbours. Meanwhile, climate change could increase the demand for irrigation water and lead to more frequent and intense climatic events such as droughts and floods.

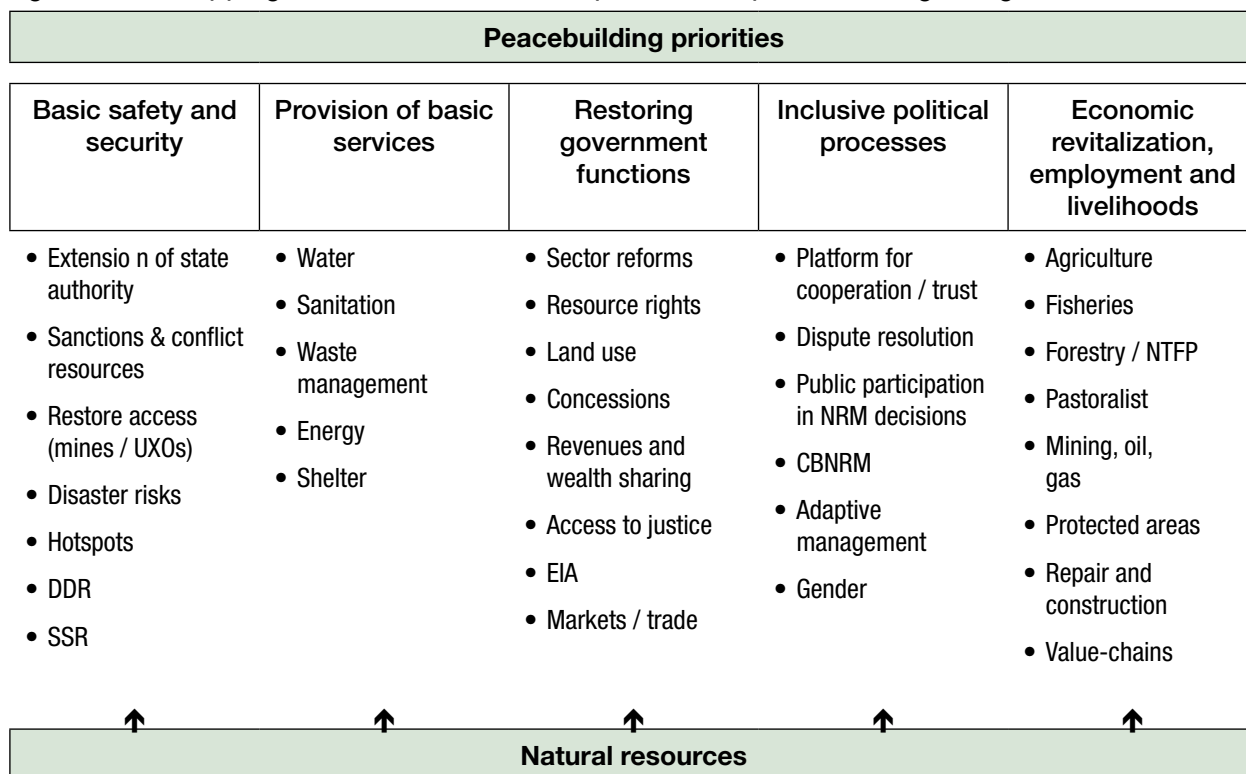
But while the management of Afghanistan's natural resources presents challenges, if managed well they also offer opportunities for economic growth, the creation of livelihoods, the resettlement of displaced populations, and opportunities for dialogue between divided communities and in an occasionally antagonistic region.

Given that 70 to 80 per cent of the Afghan population relies directly on the natural resource base for their daily survival, sustainable natural resource management is key to improving lives and providing long-term stability. At the same time, natural resources can be an important engine for economic growth in Afghanistan as long as they are managed transparently, equitably and sustainably.

In 2009, the UN Secretary General's landmark report, *Peacebuilding in the Immediate Aftermath of Conflict*, outlined five recurring areas where international assistance is frequently requested as a peacebuilding priority: safety and security, political processes, basic services, core government functions and economic revitalisation. NRM is a cross-cutting theme that has relevance across all of these areas (see figure 1 below).

In short, effective NRM is a form of conflict prevention, conflict management, and conflict resolution. Traditions, customs, rules, laws and policies that regulate the access, use and management of natural resources all aim to bring order and predictability where competition and conflict interests would otherwise be present.

Figure 1. A mapping of natural resources and post-conflict peacebuilding linkages¹⁴⁶



The broad objectives for the sort of effective NRM that will contribute to wider peacebuilding in Afghanistan are easier to list than achieve. They include improved resource governance and sustainability; better accountability and transparency; increased community participation and stronger mechanisms for dispute resolution; reduced competition for resources; and improved transboundary resource management, among other things.

But ultimately, effective and lasting change must come from Afghanistan and be led by Afghans, not imposed from outside. The challenge for the international community is to find ways to support Afghanistan in that process: providing help where necessary, stepping back where appropriate.

Unfortunate experience from the last ten years shows that the international community has often over-estimated its ability to influence events and to implement projects that actually deliver positive change on the ground.¹⁴⁷ Project managers, under pressure to spend and deliver as fast as possible, find that complex problems rarely melt away in the face of project-sized solutions.¹⁴⁸

Consequently it is important that the international community remains conscious of its limitations, humble about its role, and realistic about what can be achieved in the hugely challenging conditions of Afghanistan. At a minimum the international community has to avoid ill-advised or short-lived interventions that raise unmet expectations, fuel corruption, reward instability by spending the most aid funds in the least stable areas, or create institutions that are destined to collapse.¹⁴⁹

Recommendations

The primary responsibility for addressing the many challenges of natural resource management in Afghanistan lies, of course, with the Afghan government and people.

However, the international community, including the UN and donor agencies, is in a position to help ensure that effective natural resource management contributes in a positive way to peacebuilding in Afghanistan. In addition to the specific recommendations for each resource (listed in the chapters above), five roles in particular stand out for the international community:

1. To set a good example by making sure environmental impact assessments and conflict-sensitive approaches are a standard requirement for all appropriate development and humanitarian interventions.
2. To provide capacity-building support to implement best practice NRM structures, processes and laws; and to facilitate and encourage public participation in decision-making, long-term planning, and implementation.
3. To encourage better data collection and provide warnings when risks are detected. This can help to identify existing and potential disputes over natural resources, and integrate natural resource risks into conflict early-warning systems as well as long-term development planning.
4. To support third-party mediation in natural resource dispute resolution, both regionally and nationally. For example at a national level this could involve providing support, financial or otherwise, to civil society mediators working to address natural resource disputes at a community, grassroots level.
5. To attract international attention and catalyze funding to forestall emerging resource conflicts.

Since 2002 Afghanistan has received nearly US\$30 billion in civilian aid.¹⁵⁰ At the Tokyo Conference in July 2012 the international community pledged a further US\$16 billion in civilian aid to Afghanistan for

four years to 2016.¹⁵¹ This aid covers the full sweep of issues in Afghanistan from girls' education to institution building, from dam construction to primary health care.

Some of these projects aim to improve natural resource management directly, for example: irrigation upgrades and check dams, support to farmers, alternative livelihoods programmes for poppy producing provinces, and so on. Other projects may have unanticipated impacts on access to, and control over, natural resources: road-building programmes that affect the local value of land, or investment promotion programmes that facilitate mining in socially and environmentally sensitive areas.

As the above report demonstrates, natural resource management in Afghanistan is a complex, sensitive, and political issue. To attempt to mitigate the risk of serious unintended consequences there are three steps that the international community should take before embarking on any development or humanitarian intervention that could have an impact on natural resource management:

1. Assess the resource and conflict context. Understand the role that natural resources and the environment play in conflict in a particular area.
2. Assess elements of traditional or customary natural resource management so as to not duplicate structures that already exist. Despite years of conflict, Afghanistan is not the 'blank slate' that some assume. There are powerful traditional structures for natural resource management that continue to function; in many cases, strengthening these may be the best option.
3. Ensure that safeguards are put in place in existing international programmes to ensure that they are not inadvertently making the situation worse. Each major programme or project should undergo a peace and conflict assessment (see Annex 3) that considers its natural resource management implications, identifies potential flash points, and develops strategies to avoid problems.

Annex 1: Abbreviations

AAN	Afghan Analysts Network
AGE	anti-government elements
ANDS	Afghan National Development Strategy
ANSF	Afghan National Security Forces
APRP	Afghan Peace and Reintegration Programme
AREU	Afghanistan Research and Evaluation Unit
CNPC	China National Petroleum Corporation
FAO	Food and Agriculture Organisation of the United Nations
GDP	gross domestic product
ICWC	Interstate Commission for Water Coordination of Central Asia
ISAF	International Security Assistance Force
IWRM	integrated water resource management
MCC	Metallurgical Corporation of China
MCM	million cubic metres
MPU	mines protection unit
MRRD	Ministry of Rural Rehabilitation and Development
NABDP	National Area Based Development Programme
NATO	North Atlantic Treaty Organisation
NEPA	National Environmental Protection Agency
NSP	National Solidarity Programme
PRT	provincial reconstruction team
PSG	peacebuilding and statebuilding goal
RBA	river basin authority
RBC	river basin council
SAI	Steel Authority of India
SCO	Shanghai Cooperation Organization
UNAMA	United Nations Assistance Mission to Afghanistan
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFTPA	United Nations Framework Team on Preventive Action
UNODC	United Nations Office on Drugs and Crime
USGS	United States Geological Survey
WFP	World Food Programme

Annex 2: Further reading and useful resources

Land

Further reading

Alden Wily, L. (2009) *Recommended strategy for conflict resolution of competing high pasture claims of settled and nomadic communities in Afghanistan*, Kabul: United Nations Environment Programme

UNFPA (2012) *Land and conflict: toolkit for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action

Unruh, J. & Williams, R. C. (eds.) (2012) *Land and post-conflict peacebuilding*, London; Earthscan

UN Habitat (2007) *Handbook on Post-Conflict Land Administration and Peacebuilding*, Nairobi

Useful resources

<http://www.gltfn.net/> - The Global Land Tool Network is an alliance of global, regional and national partners, facilitated by UN Habitat, working to share knowledge and ideas on land reform, improved land management and tenure security.

<http://www.landcoalition.org/> - The International Land Coalition is a coalition of 116 organisations working to promote secure and equitable access to land for rural people in 50 countries.

Water

Further reading

CPHD (2011) *Afghanistan Human Development Report – 2011: the forgotten front: water security and the crisis in sanitation*, Kabul: Centre for Policy and Human Development

Weinthal, E., Troell, J. & Nakayama, M. (eds.) (2013) *Water and post-conflict peacebuilding*. London: Earthscan

UNFPA (2012) *Renewable resources & conflict: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action

Useful resources

<http://www.gwp.org> - Global Water Partnership - GWP was founded in 1996 to foster integrated water resource management (IWRM).

Forests

Further reading

Sexton, R. (2012) *Natural resources and conflict in Afghanistan: Seven case studies, major trends and implications for the transition*, Kabul: Afghanistan Watch

Bruch, C. , Muffett, C., & Nichols, S. S. (eds.) *Governance, natural resources, and post-conflict peacebuilding*. London: Earthscan

UNFPA (2012) *Renewable resources & conflict: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action

Useful resources

<http://www.illegal-logging.info/> - an on-line repository of information and analysis on illegal logging.

Drugs

Further reading

UNODC (2011a) *The Global Afghan Opium Trade – a threat assessment*, Kabul: United Nations' Office on Drugs and Crime

Catarious, D. & Russell, A. (2012) 'Counter-narcotics efforts and Afghan poppy farmers: Finding the right approach' in Lujala, P. & Rustad, S. A. (eds.) *High-value natural resources and post-conflict peacebuilding*. London: Earthscan.

Goodhand, J. & Mansfield, D. (2010) *Drugs and (dis)order: a study of the opium trade, political settlements and state-making in Afghanistan*, London: London School of Economics

Extractives

Further reading

Noorani, J. (2011) *Hajigak – the jewel of Afghan mines*, Kabul: Integrity Watch Afghanistan

Stanley, M. & Mikhaylova, E. (2011) *Mineral resource tenders and mining infrastructure projects guiding principles – case study: the Aynak copper deposit, Afghanistan*, Washington: World Bank

Lujala, P. & Rustad, S. A. (eds.) *High-value natural resources and post-conflict peacebuilding*, London: Earthscan.

UNFPA (2012b) *Extractive industries and conflict: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action

Useful resources

<http://naturalresourcecharter.org/> - The Natural Resource Charter is a set of principles for governments and societies on how to best harness the opportunities created by extractive resources for development.

<http://www.eiti.org> - The Extractive Industries Transparency Initiative (EITI) is a globally developed standard that promotes revenue transparency at the national level.

<http://www.publishwhatyoupay.org/> - Publish What You Pay (PWYP) is a global network of civil society organisations pushing for greater transparency in extractive industries.

<http://www.voluntaryprinciples.org/> - The Voluntary Principles on Security and Human Rights are designed to help extractive companies maintain the safety and security of their operations within a framework that ensures respect for human rights.

Annex 3: Rapid project-level peace and conflict assessment

Understanding the context in which a project or intervention is being planned is the basis for designing strategic responses that are conflict sensitive, and that are generally more likely to contribute to, rather than undermine, the prospects for peace.

This is important in all fragile settings, but particularly so in Afghanistan, where no policy or project, whether it comes from government or the international community, is fully insulated from a potential conflict over natural resources.

The questions below should help guide project managers plan their interventions and identify potential risks and opportunities. The questions can be addressed as part of a report, through a questionnaire or with a structured discussion by project members, or in consultations with affected community members etc. A more detailed toolkits from UNEP and UNDG (see below) provide further diagnostic questions together with programming tools and suggested indicators.

Guiding questions

A. Assessing the context

1. What are the key natural resources in the project area? (*describe which natural resources are used for what purpose – livelihood, industrial extraction etc.*)
2. Who controls these natural resources? (*describe the power structures that are present, and the access that women and marginalised groups have to important livelihood resources*)
3. What are the main conflict risks in the area? (*describe the protagonists, their grievances/ interests*)
4. How does natural resource management interact with conflict in the project area? (*describe the issues, parties, roles, dynamics, incentives and outcomes*).
5. What is the level of state capacity to extend its presence and authority into rural areas in order to enforce laws and resolve disputes? (*describe how natural resource disputes are currently mediated?*)

6. What previous peacebuilding initiatives have been deployed in the project area? (*describe initiatives, successes and failings*)

B. Assessing the intervention

1. What is the nature of the project? (*describe the project's scope, objectives, stakeholders and duration*)
2. Have there been other similar projects in the area? (*describe the key lessons that come from these projects*)
3. What institutions/ organisations does the project seek to engage? (*describe their interests and capacities for peacebuilding*)
4. What potential negative impacts does the project have on natural resources in the project area? How might this have an impact on conflict dynamics?
5. What potential positive impacts does the project have on natural resources in the project area? How might this have an impact on conflict dynamics?
6. What mechanisms does the project currently have in place to address conflict and deal with grievances?

C. Maximising opportunities for peacebuilding

1. What sort of safeguards can the project put in place to avoid the identified risks?
2. How can the project maximise the identified positive opportunities?
3. How can the project assess its progress, and learn from its experience?

Useful resources

UNEP (2012) *Natural Resources, Peacebuilding and Statebuilding: A Toolkit for Analysis and Programming in Fragile States*, Geneva: UNEP

UNDG (2012) *Guidance Note: Natural Resource Management in Transition Settings*, New York: United Nations Development Group

Annex 4: Bibliography

Abbot, C., Rogers, P. & Sloboda, J. (2006) *Global responses to global threats: sustainable security for the 21st century*, Oxford: Oxford Research Group

Alden Wily, L. (2008) *Whose land is it anyway? Commons and conflict states: why the ownership of the commons matters in making and keeping peace*,

Alden Wily, L. (2009) *Recommended strategy for conflict resolution of competing high pasture claims of settled and nomadic communities in Afghanistan*, Kabul: United Nations Environment Programme

Alden Wily, L. (2013) 'Resolving natural resource conflicts to help prevent war: a case from Afghanistan' in Young, H. & Goldman, L. (eds.) *Livelihoods, Natural resources and post-conflict peacebuilding*. London: Earthscan

AREU (2012) *The A to Z Guide to Afghan Assistance*, Kabul: Afghanistan Research and Evaluation Unit

Atmar, H. & Goodhand, J. (2002) *Aid, Conflict and Peacebuilding in Afghanistan: what lessons can be learned?*, London: International Alert

Bader, H, Douglas, C., Fairchild, J., Kaczmarek, D. & Hanna, C. (2010) *The Afghanistan Timber trade: an evaluation of the interaction between the insurgency, G/RoA and Criminality*, Kabul: Natural Resource Counterinsurgency Cell (NRCC)

Barr, H. (2012) 'Stealing for nothing – international support for anticorruption efforts', pp. 181-186 in van Biljert, M. & Kouvo, S. (eds.) *Snapshots of an intervention: the unlearned lessons of Afghanistan's decade of assistance (2001-2011)*, Kabul: Afghan Analysts Network

Batson, D. (2012) 'Snow leopards and cadastres: rare sightings in post-conflict Afghanistan' in Unruh, J. & Williams, R. C. (eds.) *Land and post-conflict peacebuilding*. London: Earthscan

Beehner, L. (2006) *Afghanistan's role in Iran's drug problem*, New York: Council on Foreign Relations

Bowling, B. & Zaidi, A. (2010) *Developing capacity for natural resource management in Afghanistan: process, challenges, and lessons learned by UNEP*, UNEP

Bruch, C., Nakayama, M., & Coyle, I. (eds.) (2011) *Harnessing Natural Resources for Peacebuilding: Lessons from U.S. and Japanese assistance*, Washington: Environmental Law Institute

Bruch, C. Muffett, C. & Nichols, S. (eds.) (2013) *Governance, natural resources, and post-conflict peacebuilding*. London: Earthscan

Buddenburg, D. (2012) 'Crop substitution and narcotics control', pp. 173-180 in van Biljert, M. & Kouvo, S. (eds.) *Snapshots of an intervention: the unlearned lessons of Afghanistan's decade of assistance (2001-2011)*, Kabul: Afghan Analysts Network

Catarious, D. & Russell, A. (2012) 'Counter-narcotics efforts and Afghan poppy farmers: Finding the right approach' in Lujala, P. & Rustad, S. A. (eds.) *High-value natural resources and post-conflict peacebuilding*, London: Earthscan

Chesterman, S. (2002) 'Tiptoeing through Afghanistan: the future of UN Statebuilding', New York: International Peace Academy

- CPHD (2011) *Afghanistan Human Development Report – 2011: the forgotten front: water security and the crisis in sanitation*, Kabul: Centre for Policy and Human Development
- Dabelstein, N. (2002) *Aid responses to Afghanistan: Lessons from previous evaluations*, Paris: Organisation for Economic Cooperation and Development (OECD)
- Deghan, A., Palmer-Moloney, L. J. & Mirzaee, M. (2013) 'Water security and scarcity: Potential destabilization in Western Afghanistan and Iranian Sistan and Baluchestan due to transboundary water conflicts' in Weinthal, E., Troell, J. & Nakayama, M. (eds.) *Water and post-conflict peacebuilding*, London: Earthscan
- Dorransoro, G. (2009) *The Taliban's winning strategy in Afghanistan*, Washington: Carnegie Endowment for International Peace
- DuPée, M. (2012) 'Afghanistan's Conflict Minerals: The Crime-State-Insurgent Nexus' in *CTC Sentinel*: West Point
- Government of Afghanistan, (2012) *Overview of the Forestry Sector in Afghanistan*, Kabul: Forestry Department of the Natural Resources Directorate in the Ministry of Agriculture, Irrigation and Livestock,
- Fishstein, P. & Wilder, A. (2012) *Winning hearts and minds? Examining the relationship between aid and security in Afghanistan*, Boston: Feinstein International Centre
- Global Witness (2012a) *Getting to Gold: how Afghanistan's first mining contracts can support transparency and accountability in the sector*, London: Global Witness
- Global Witness (2012b) *Copper bottomed: bolstering the Aynak contract: Afghanistan's first major mining deal*, London: Global Witness
- Goodhand, J. & Mansfield, D. (2010) *Drugs and (dis)order: a study of the opium trade, political settlements and state-making in Afghanistan*, London: London School of Economics
- Grae, J., (2005) *Who owns the farm? Rural women's access to land and livestock*, Kabul: AREU
- Haysom, N. & Kane, S. (2009) *Negotiating natural resources for peace: ownership, control and wealth-sharing*, Geneva: Centre for Humanitarian Dialogue
- Horsman, S. (2008) *Afghanistan and transboundary water management on the Amu Darya: A political history*: Helsinki: Helsinki University of Technology
- ILO (2012) *Afghanistan: Time to move to Sustainable Jobs - Study on the State of Employment in Afghanistan- May 2012*, Kabul: International Labour Organisation
- Jackson, A. (2009) *The Cost of War – Afghan experiences of conflict, 1978-2009*, Kabul: Oxfam International
- Klemm, W. & Shobair, S. (2011) *The Afghan Part of Amu Darya Basin: Impact of Irrigation in North Afghanistan on water use in the Amu Darya Basin*, Kabul/ Rome: Food and Agriculture Organization
- Koehler, J. (2005) *Conflict processing and the opium poppy economy in Afghanistan*, Kabul: Project for Alternative Livelihoods in Eastern Afghanistan (PAC)
- Lamb, R. & Cordesman, A. (2012) *Towards 2014: Afghanistan, Pakistan, and the US role in the region*, Centre for Strategic and International Studies
- Lonergan, S. & Jensen, D. (2012) 'Natural resources and post-conflict assessment, restoration, remediation, and reconstruction – lessons and way forward', in Lonergan, S. & Jensen, D. (eds.) *Assessing and restoring natural resources in post-conflict peacebuilding*, London: Earthscan

- Loneragan, S. & Jensen, D. (eds.) (2012) *Assessing and restoring natural resources in post-conflict peacebuilding*, London: Earthscan
- Lujala, P. & Rustad, S. A. (eds.) (2012) *High-value natural resources and post-conflict peacebuilding*, London: Earthscan
- Maas, C. & Ruttig, T. (2011) *Is Afghanistan on the brink of a new civil war? Possible scenarios and influencing factors in the transition process*, Kabul/ Berlin: German Institute for International and Security Affairs
- Mansfield, D. et al. (2011) *Managing concurrent and repeated risks – explaining the reductions in opium production in central Helmand between 2008 and 2011*, Kabul: AREU
- NEPA (2008) *Afghanistan's environment – 2008*, Kabul: National Environmental Protection Agency
- Noorani, J. (2011) *Hajjigak – the jewel of Afghan mines*, Kabul: Integrity Watch Afghanistan
- Oxfam (2009) *The Cost of War – Afghan experiences of conflict – 1978-2009*, Kabul: Oxfam
- Pahula, S. (2009) *Planning and Prioritizing Water Resources Investments: the example of the Kabul River Basin*, Kabul: World Bank
- Pain, A. (2012) 'The Janus nature of opium poppy: a view from the field' in Lujala, P. & Rustad, S. A. (eds.) *High-value natural resources and post-conflict peacebuilding*. London: Earthscan
- Palmer-Molony, L.J. (2012) 'Water's role in measuring security and stability in Helmand Province, Afghanistan' in Weinthal, E., Troell, J. & Nakayama, M. (eds.) *Water and post-conflict peacebuilding*, London: Earthscan
- Peters, G. (2009) *How opium profits the Taliban*, Washington: United States Institute for Peace
- Pinera, J-F. & Reed, R. (2012) 'A tale of two cities: restoring water services in Kabul and Monrovia' in Lonergan, S. & Jensen, D. (eds.) *Assessing and restoring natural resources in post-conflict peacebuilding*, London: Earthscan
- Poole, L. (2011) *Afghanistan: tracking major resource flows, 2002-2010*, UK: Development Initiatives
- Roe, A. (2012) 'Swords into ploughshares? Assessing natural resources and securing agricultural livelihoods in rural Afghanistan' in Young, H. & Goldman, L. (eds.) *Livelihoods, Natural resources and post-conflict peacebuilding*, London: Earthscan
- Sait, S. (2012) 'Unexplored dimensions: Islamic land systems in Afghanistan, Indonesia, Iraq and Somalia' in Unruh, J. & Williams, R. C. (eds.) *Land and post-conflict peacebuilding*, London: Earthscan
- Sato, M. (2011) 'Disarmament, demobilization, reintegration, and natural resources in Afghanistan' in Bruch et al. (eds.) (2011) *Harnessing natural resources for peacebuilding: lessons from U.S. and Japanese assistance*, Washington: Environmental Law Institute
- Schetter, C. (2005) 'Ethnoscapes, national territorialisation and the Afghan war' in *Geopolitics*, vol. 10: 50-75
- Sexton, R. (2012) *Natural resources and conflict in Afghanistan: Seven case studies, major trends and implications for the transition*, Kabul: Afghanistan Watch
- Stanfield, J. D., Murtazahvili, J. B., Safar, M. Y., & Salam, A. (2012) 'Community documentation of land tenure and its contribution to state-building in Afghanistan' in Unruh, J. & Williams, R. C. (eds.) *Land and post-conflict peacebuilding*, London: Earthscan

- Stanley, M. & Mikhaylova, E. (2011) *Mineral resource tenders and mining infrastructure projects guiding principles – case study: the Aynak copper deposit, Afghanistan*, Washington: World Bank
- Strand, A., Hakim, M., Newrazi, S., Sarwari, A., & Williams, A. (2010) *Afghan Hydrocarbons: a source for development or for conflict? A risk assessment of Norwegian Involvement in Development of the Afghan oil and gas industry*, Chr. Michelsen Institute
- Tänzler, D. & Altenberg, J. (2010) *Toolkit and Guidance for preventing and managing land natural resources conflict and capacity inventory*, New York: UN Framework Team on Preventive Action
- Thomas, V., Mumtaz, W., Azizi, M. A. (2012) *Mind the Gap? Local practices and institutional reforms for water allocation in Afghanistan's Panj-Amu River Basin*, Kabul: AREU
- UNAMA/ UNOHCHR (2012) *Afghanistan – Annual Report, 2011 – Protection of Civilians in armed conflict*, Kabul: UNAMA/ UNOHCHR
- UNDG (2012) *Guidance Note: Natural Resource Management in Transition Settings*, New York: United Nations Development Group
- UNEP (2003) *Afghanistan post-conflict environmental assessment*, Geneva: United Nations Environment Programme
- UNEP (2006a) *Progress report on the capacity building and institutional development programme for environmental management in Afghanistan, 2003-2005*, Kabul: United Nations Environment Programme
- UNEP (2006b) *Afghanistan's environment recovery: a post-conflict plan for people and their natural resources*, Kabul: United Nations Environment Programme
- UNEP (2012) *Natural Resources, Peacebuilding and Statebuilding: A Toolkit for Analysis and Programming in Fragile States (UNEP)*, Geneva: UNEP
- UNFPTA (2011) *Conflict prevention in resource-rich economies*, New York: UN Framework Team on Preventive Action
- UNFPTA (2012a) *Renewable resources & conflict: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action
- UNFPTA (2012b) *Extractive industries and conflict: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action
- UNFPTA (2012c) *Land and conflict: toolkit for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action
- UNFPTA (2012d) *Strengthening capacity for conflict-sensitive natural resource management: toolkit and guidance for preventing and managing land and natural resource conflict*, New York: UN Framework Team on Preventive Action
- UNFPTA (2012e) *Natural resources, conflict prevention and sustainable development*, New York: UN Framework Team on Preventive Action
- UN General Assembly (2009). *Report of the Secretary-General on peacebuilding in the immediate aftermath of conflict*, A/63/881-S/2009/304. New York: UN
- UN General Assembly (2010). *Report of the Secretary-General on peacebuilding in the immediate aftermath of conflict*, A/64/866–S/2010/386. UN: New York

- UN General Assembly (2012) *Report of the Secretary-General on peacebuilding in the aftermath of conflict, A/67/499–S/2012/746*. UN: New York
- UNHCR (2012) Press release: 50,000 Afghans voluntarily return to Afghanistan this year, Kabul: United Nations High Commission for Refugees
- UNOHCHR (2012) *Human rights dimensions of poverty in Afghanistan*, Geneva/ Kabul: United Nations Office for the High Commissioner on Human Rights
- UNODC (2010a) *Afghan Cannabis Survey, 2009*, Kabul: United Nations' Office on Drugs and Crime
- UNODC (2010b) *Afghanistan Opium Survey – summary findings*, Kabul: United Nations' Office on Drugs and Crime
- UNODC (2011a) *The Global Afghan Opium Trade – a threat assessment*, Kabul: United Nations' Office on Drugs and Crime
- UNODC (2011b) *The World Drug Report*, Vienna: United Nations Office on Drugs and Crime
- UNODC (2012) *Country Programme for Afghanistan – 2012-2014*, Kabul: United Nations' Office on Drugs and Crime
- Unruh, J. & Shalaby, M. (2011) 'Road infrastructure reconstruction as a peacebuilding priority in Afghanistan: Negative implications for land rights' in Bruch et al. (eds.) *Harnessing Natural Resources for Peacebuilding: Lessons from U.S. and Japanese assistance*, Washington: Environmental Law Institute
- Unruh, J. & Williams, R. C. (eds.) (2012) *Land and post-conflict peacebuilding*, London: Earthscan
- Van Biljert, M. (2012) 'Building Political Institutions' in van Biljert, M. & Kouvo, S. (eds.) *Snapshots of an intervention: the unlearned lessons of Afghanistan's decade of assistance (2001-2011)*, Kabul: Afghan Analysts Network
- Waleij, A., Bosetti, T., Doran, R. & Liljedahl, B. (2013) 'Environmental stewardship in peace operations: the role of the military' in Bruch, C. Muffett, C. & Nichols, S. (eds.) *Governance, natural resources, and post-conflict peacebuilding*. London: Earthscan
- Waldman, M. (2008) *Community Peacebuilding in Afghanistan – the case for a national strategy*, Oxford: Oxfam International
- Weinthal, E., Troell, J. & Nakayama, M. (eds.) (2013) *Water and post-conflict peacebuilding*, London: Earthscan
- Wolf, A. T. (1998) 'Conflict and cooperation along international waterways' in *Water Policy*, Vol. 1 #2, pp. 251-265
- World Bank (2012) *Afghanistan in Transition: looking beyond 2012*, Washington: World Bank
- Young, H. & Goldman, L. (eds.) (2013) *Livelihoods, Natural resources and post-conflict peacebuilding*. London: Earthscan
- Zahler, P., Wilkie, D., Painter, M., & Ingram, C. (2013) 'The role of conservation in promoting stability and security in at-risk communities' in Bruch, C. Muffett, C. & Nichols, S. (eds.) *Governance, natural resources, and post-conflict peacebuilding*. London: Earthscan

Annex 5: References

- 1 ILO, 2012
- 2 Waldman, 2008
- 3 UNFPA, 2012a
- 4 UNFPA, 2012a
- 5 See <http://www.cfr.org/afghanistan/salvaging-governance-reform-afghanistan/p27778> and Dorrnsoro, 2009
- 6 Grace, 2005
- 7 UNODC, 2012
- 8 For more on the cost of the conflict in Afghanistan see Oxfam, 2009
- 9 UNAMA/ UNOHCHR, 2012
- 10 UN General Assembly, 2009
- 11 Waldman, 2008; Fishstein & Wilder, 2012
- 12 In 2001 the ratio of aid to gross national income was 25 per cent, by 2012 this had risen to 50 per cent. World Bank, 2012
- 13 World Bank, 2012
- 14 World Bank, 2012
- 15 UNFPA, 2012a
- 16 See UNEP, 2003, 2006a, 2006b
- 17 See UNFPA, 2011a &, 2012a, 2012b, 2012c, 2012d, 2012e
- 18 www.environmentalpeacebuilding.org - Also see Young & Goldman, 2013; Unruh & Williams, 2012; Weinthal, Troell & Nakayam, 2013; Loneragan & Jensen, 2012; Lujala & Rustad, 2012;
- 19 Stanfield, et al, 2012. Although it is estimated that just 1.8 million hectares of that land is irrigated, CPHD, 2011
- 20 Alden Wily, 2013
- 21 Waldman, 2008
- 22 Batson, 2012
- 23 UNFPA, 2012c
- 24 Stanfield et al., 2012
- 25 Batson, 2012
- 26 NEPA, 2008
- 27 World Bank, <http://data.worldbank.org/indicator/SP.POP.GROW>
- 28 According to the Central Statistics Organization, Kabul. <http://cso.gov.af/en/page/6449>
- 29 CPHD, 2011
- 30 Batson, 2012
- 31 Alden Wily, 2013
- 32 UNHCR, 2012
- 33 UNEP, 2003
- 34 Irvine, S. (2007) *Powerful 'grab Afghan land'*, BBC http://news.bbc.co.uk/1/hi/world/south_asia/6981035.stm
- 35 Sexton, 2012

- 36 Sexton, 2012
- 37 Stanfield et al., 2012
- 38 Stanfield et al., 2012
- 39 Alden Wily, 2008
- 40 Alden Wily, 2013
- 41 See Sait, 2012, Alden Wily, 2013 and Batson, 2012 for a discussion of some of these programmes.
- 42 Batson, 2012
- 43 Stanfield et al., 2012
- 44 Stanfield et al., 2012
- 45 Alden Wily, 2013
- 46 UNFTPA, 2012c
- 47 Stanfield et al., 2012
- 48 Alden Wily, 2009
- 49 Alden Wily, 2013
- 50 UNFTPA, 2012c
- 51 Waldman, 2008
- 52 CPHD, 2011
- 53 CPHD, 2011
- 54 CPHD, 2011
- 55 CPHD, 2011
- 56 CPHD, 2011
- 57 CPHD, 2011
- 58 CPHD, 2011
- 59 CPHD, 2011
- 60 CPHD, 2011
- 61 Roe, 2013
- 62 Deghan, Palmer-Moloney & Mirzaee, 2013
- 63 Deghan, Palmer-Moloney & Mirzaee, 2013
- 64 Kelmm & SHobaiur,
- 65 Horsman, 2008
- 66 Thomas, Mumtaz & Azizi, 2012
- 67 AREU, 2012
- 68 Thomas, Mumtaz & Azizi, 2012
- 69 AREU, 2012. The statistic is from 2007.
- 70 CPHD, 2011
- 71 CPHD, 2011
- 72 AREU, 2012
- 73 CPHD, 2011
- 74 Pahuja, 2009
- 75 CPHD, 2011
- 76 CPHD, 2011
- 77 Deghan, Palmer-Moloney & Mirzaee, 2013
- 78 Government of Afghanistan, 2012

- 79 CPHD, 2011
- 80 CPHD, 2011
- 81 Mustafa, K. (2011) India to help Afghanistan build 12 dams on Kabul River, Islamabad: the International News, [http://www.thenews.com.pk/TodaysPrintDetail.aspx? 13&dt=5/12/2011 ID=5933&Cat=](http://www.thenews.com.pk/TodaysPrintDetail.aspx?13&dt=5/12/2011 ID=5933&Cat=)
- 82 Deghan, Palmer-Moloney & Mirazae, 2013
- 83 Deghan, Palmer-Moloney & Mirazae, 2013, see also <http://www.ens-newswire.com/ens/feb2010/2010-02-16-01.html>
- 84 Ramin (2011), *Iran's forces attack Afghan post in Nimroz*, e-Ariana, <http://www.e-ariana.com/ariana/eariana.nsf/allDocs/6AAAC28C6F8139B18725786F006911F0?OpenDocument>
- 85 Adapted from CPHD, 2011
- 86 Wolf, A. T., 1998
- 87 Thomas, Mumtaz & Azizi, 2012
- 88 CPHD, 2011
- 89 See <http://amudaryabasin.net/content/about-network>
- 90 UNEP, 2003
- 91 Government of Afghanistan, 2012
- 92 Government of Afghanistan, 2012
- 93 Bader et al. 2010
- 94 Sexton, 2012
- 95 NEPA, 2008
- 96 NEPA, 2008
- 97 NEPA, 2008
- 98 Government of Afghanistan, 2012
- 99 Bader et al., 2010
- 100 Sexton, 2012
- 101 Sexton, 2012
- 102 Sexton, 2012
- 103 Bader et al., 2010
- 104 Sexton, 2012
- 105 Consultations in Kabul, August 2012
- 106 UNODC, 2010a
- 107 UNODC, 2012
- 108 UNODC, 2012
- 109 UNODC, 2012
- 110 UNODC, 2012
- 111 Mansfield, et el., 2011
- 112 <http://www.thenational.ae/news/world/south-asia/afghanistans-new-crisis-the-spread-of-hiv-aids>
- 113 Peters, 2009
- 114 UNODC, 2011a
- 115 UNODC, 2012
- 116 UNODC, 2012
- 117 UNODC, 2012

- 118 UNODC, 2012
- 119 Buddenburg, 2012
- 120 Mansfield et al., 2011
- 121 Mansfield et al., 2011
- 122 Beehner, 2006
- 123 Kazemi, S.R., (2012) *Upcoming Regional Co-operation Conference on Afghanistan: A Primer*, Kabul: Afghan Analysts Network, <http://www.aan-afghanistan.org/index.asp?id=2810>
- 124 Ibrahimi, N. (2012) Guest Blog: Heart of Asia Hardly Beating at the Second 'Heart of Asia Meeting', Kabul: Afghan Analysts Network, <http://www.aan-afghanistan.org/index.asp?id=2820>
- 125 AREU, 2012
- 126 Global Witness 2012a, 2012b
- 127 AREU, 2012
- 128 Sexton, 2012
- 129 DuPée, 2012
- 130 <http://mom.gov.af/en/page/7661>
- 131 Global Witness, 2012a; Noorani, 2011
- 132 Sexton, 2012
- 133 Sexton, 2012
- 134 AREU, 2012
- 135 Sexton, 2012
- 136 AREU, 2012
- 137 See <http://english.sina.com/china/2012/0607/474640.html>
- 138 AREU, 2012
- 139 World Bank, 2012
- 140 AREU, 2012
- 141 AREU, 2012
- 142 AREU, 2012
- 143 See http://www.afghan-web.com/environment/afghan_environment_law.html
- 144 See http://zeenews.india.com/news/south-asia/afghan-taliban-threatens-mining-companies-monitor_637316.html
- 145 See http://www.voluntaryprinciples.org/files/voluntary_principles_english.pdf
- 146 UNDG, 2012 & UN General Assembly, 2009
- 147 Fishstein & Wilder, 2012
- 148 Van Bijlert, 2012
- 149 Fishstein & Wilder, 2012
- 150 Poole, 2011
- 151 See <http://www.guardian.co.uk/world/2012/jul/08/afghanistan-donors-16bn-development-aid>



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