# 6.30 DDR and Natural Resources

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#### NOTE

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# **6.30** DDR and Natural Resources

### Summary

This module on natural resources and DDR aims to draw attention to the importance of natural resources¹ throughout the DDR process in conflict and post-conflict settings and to improve UN inter-agency coordination to address risks and opportunities related to natural resources in DDR, including by strengthening national and local capacities.² Evidence indicates that at least 40 per cent of internal conflicts over a 60-year period were associated with land and natural resources, and that this link increases the risk of a relapse into conflict in the first five years following the end of hostilities.³ It is critical that DDR programmes take these linkages into account to avoid exacerbating potential conflicts and minimize negative environmental impacts that can undermine the success of reintegration, as well as to effectively use the available livelihoods opportunities offered through the sustainable use of natural resources.

In particular, the activities of armed forces and groups during conflict often implicate natural resources, which may be used as a means of financing conflict activities. They may also contribute to the outbreak or relapse of violence as a result of real or perceived grievances tied to inequitable benefit sharing, environmental damage from exploitation and land disputes. Environmental degradation, population displacement and the spread of diseases

can be exacerbated by mismanagement of natural resources and inadequate design and implementation of DDR programmes.

Dealing with the illegal exploitation of natural resources by ex-combatants and associated groups not only requires promotion of alternative livelihoods and reconciliation, but also the strengthening of the State and local authorities to efDealing with the illegal exploitation of natural resources by ex-combatants and associated groups requires promotion of alternative livelihoods and reconciliation and strengthening of the State and local authorities.

fectively manage natural resources. When DDR programmes promote good governance practices, transparent policies and community engagement around natural resource issues, they can also simultaneously address conflict drivers and the impacts of conflict on the environment and host communities while supporting sustainable economic and social reintegration opportunities.

This module highlights the need for the international community to translate the recognized linkages between natural resources and conflict and peacebuilding in the design and implementation of DDR programmes. Through enhanced cooperation, coordination and dialogue among relevant stakeholders in DDR and natural resource, the linkages between these interventions can be addressed in a more conscious and deliberate manner that supports DDR and reintegration in the context of wider recovery, peacebuilding

and sustainable development. Acknowledging the importance of gender equality in natural resource management, this module also accentuates the importance of addressing gender-specific needs and opportunities in natural resource-related components of DDR programmes.

Finally, this module recognizes that the degree to which natural resources are incorporated into DDR will vary based on the size, resource availability, partners and capacity of a given programme. While some larger programmes may have natural resource management experts available to inform context analyses, assessment processes and subsequent programme design and implementation, other DDR programmes will need to rely primarily on external experts and partners. However, limited natural resource capacities within a DDR programme should not discourage planners and practitioners from capitalizing on the opportunities or guidance available and seek collaboration and possible programme synergies with other partners that can bring in natural resource management expertise. In fact, limited internal capacity should prompt programmes to further engage and build partnerships with the natural resource management community, where possible, to begin to address linkages more deliberately.

### 1. Module scope and objectives

This module provides DDR policy makers and practitioners with necessary information on the linkages between natural resources and DDR programmes during the various stages of the DDR process, with particular emphasis on economic and social reintegration. Guidance is provided on the risks and opportunities presented by natural resources in an effort to improve the overall effectiveness and sustainability of DDR interventions, to minimize associated risks that threaten people's health, livelihoods and security and build economic and environmental resilience against future crises. The module highlights the role of natural resources in all phases of the conflict cycle, focusing primarily on the linkages with armed groups. It covers the linkages between the activities of armed forces and groups and natural resources and emphasizes the ways that natural resource management can support reconciliation and sustainable reintegration through livelihoods and employment creation.

The following sections of this module will provide DDR policy makers and practitioners with guidance to identify and include the linkages between natural resources and armed forces and groups in pre-programme conflict and security analysis, DDR specific assessments and to identify subsequent risks and opportunities for incorporating natural resources in programme planning, design and implementation. In addition, it will offer specific guidance to ensure that this is done in a gender-responsive way.

### 2. Terms, definitions and abbreviations

Annex A contains the terms, definitions and abbreviations used in this standard. A complete glossary of all the terms, definitions and abbreviations used in the series of integrated DDR standards (IDDRS) is given in IDDRS 1.20.

In the IDDRS series, the words 'shall', 'should' and 'may' are used to indicate the intended degree of compliance with the standards laid down. This use is consistent with the language used in the International Organization for Standardization standards and guidelines:

- a) 'shall' is used to indicate requirements, methods or specifications that are to be applied in order to conform to the standard.
- b) 'should' is used to indicate the preferred requirements, methods or specifications.
- c) 'may' is used to indicate a possible method or course of action.

#### 3. Introduction

When well-managed, natural resources have the potential to provide for wealth, sustainable livelihoods and employment opportunities. However, there is also mounting evidence that in many violent conflicts worldwide there is a strong link between armed conflict and the exploitation and weak governance or mismanagement of natural resources.<sup>4</sup>

Since 1990 at least 18 violent conflicts were fuelled by the exploitation of natural resources,<sup>5</sup> and over the past 60 years, at least 40 percent of all intrastate conflicts were linked to natural resources.<sup>6</sup> Looking back over the history of UN peacekeeping operations, 17 missions have been deployed to conflicts fuelled or financed by natural resources, yet only 4 of these missions have had a direct mandate to tackle natural resource challenges.<sup>7</sup> The United Nations recognizes the need to incorporate the environment and natural resource

dimensions of conflict and peacebuilding into the Integrated Mission Planning Process and the Integrated Strategic Framework, including for DDR.<sup>8</sup>

Often used to fund and sustain the political and military agendas of armed forces and groups in conflict, poorly-governed natural resources such as minerals, oil and gas, timber and agricultural commodities

Often used to fund military agendas and groups in conflict, poorly-governed natural resources have come to be understood as a serious threat to peace, security and development.

have come to be understood as a serious threat to peace, security and development. The exploitation of natural resources and related environmental stress can have implications on all phases of the conflict cycle, from contributing to the outbreak and perpetuation of violence to undermining prospects for peace. In addition, the environment itself may be damaged through scorched-earth tactics in order to harm specific groups of people or render land and areas unusable by opposing groups or through coping mechanisms that may degrade the natural resource base but are necessary for communities to sustain themselves. This environmental damage, coupled with the collapse of institutions, can present significant risks that threaten people's health, livelihoods and security.

Although these evident risks exist, natural resources also have the potential to generate important opportunities for peacebuilding, amongst others through sustainable livelihoods recovery and equitable sharing of benefits from exploited natural resources. In post-conflict contexts where DDR programmes are present, availability of natural

resources have been identified as key contributors to economic recovery, if used sustainably. Through the sound management and use of natural resources, individuals can secure their livelihoods and countries can generate revenue, stimulate exports, and engage the private sector for employment-creation purposes. Furthermore, natural resource sectors provide both temporary (Track A) and more sustainable (Track B) employment opportunities, as outlined in the United Nations Post Conflict Policy for Employment Creation, Income Generation and Reintegration (see Figure 1).<sup>11</sup> In addition to their economic benefits, natural resources can play an important role in supporting successful social reintegration and reconciliation by encouraging both individual and community participation in natural resource management and ensuring access to grievance and dispute-resolution mechanisms, respectively. However, to date, the role of natural resources in successful reintegration has gone largely unmeasured and little consideration has been paid to their sustainable use.

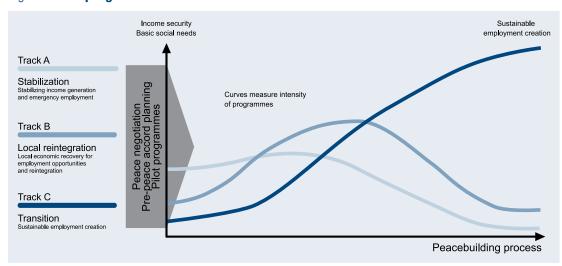


Figure 1 One programme on three concurrent tracks

Gender issues are crucial for sustainability and efficiency in economic recovery when it comes to natural resources, as gender differences, arising from the socially constructed relationships between and among men and women, affect distribution of capital assets, such as land, credit, skills and participation in decision making. Analyzing the gendered division of labor in families, communities and society at large is essential for understanding how natural resources can be effectively used for peacebuilding and when planning reinsertion and reintegration opportunities for female and male DDR participants and beneficiaries.

Sound management and governance of natural resources are essential to peace, security and sustainable development. To ensure that growth in natural resource sectors will contribute positively to DDR, the risks and opportunities presented by natural resource management must be fully analyzed and incorporated into programme planning, design and implementation. These include the potential for natural resources to re-initiate recruitment, which may lead to the reoccurrence of conflict, or poor management of natural

resources, which may worsen grievances between the state, armed forces and groups, and the civilian population. Since natural resources underpin livelihoods for the vast majority of populations in post-conflict contexts, analysis must also include ways in which certain groups, such as women, youth, persons with disabilities or different minorities, to access and productively use natural resources.<sup>12</sup> Also, the linkages between criminal groups, armed forces and groups and illicit trade must be taken into account.

Since natural resource management activities take place at the local, regional and national levels, there are multiple opportunities to work cooperatively with relevant stakeholders during DDR programming. By working with other planners and managers in (early) recovery, peacebuilding and development initiatives, DDR programmes can help to ensure that natural resources contribute positively to economically and environmentally sustainable reintegration.

### 4. Guiding principles

#### 4.1. Do no harm

DDR programmes should ensure that they are not implementing or encouraging practices that will threaten the long-term sustainability of natural resources and the livelihoods that depend on them. They should further seek to ensure that they will not contribute to potential environment-related health problems; this is particularly important when considering water resources, land allocation and increase in demand for natural resources from development programmes or aid groups (such as increased demand for charcoal, timber, etc.).

Since natural resource interventions will inevitably affect access to resources by user groups, DDR practitioners should approach natural resource issues with conflict sensitivity to ensure that programmes do not exacerbate conflict (do no harm) or environmental damage, are equipped to deal with potential tensions related to natural resources and encourage for grievance and dispute resolution mechanisms are put in place help avoid a return to violence. In particular, the following issues should be included in "do no harm" measures: a) resource scarcity and access to natural resources; b) governance of natural resources and the environment, in terms of benefits sharing, public participation and especially the participation of women and other often excluded groups, transparency, and access to information; and c) transboundary dynamics and pressures; d) negative impact of programmes on the environment.<sup>13</sup>

#### 4.2. Adapt a gender-responsive approach to NRM throughout the DDR programme cycle

Equitable participation and access shall be ensured for women, men, girls and boys with regard to natural resource-related opportunities and benefits. A special emphasis should be on securing tenure and access to land and other resources for women and girls, since this is shown to be key to their successful reintegration,<sup>14</sup> as well as to providing both male and female participants with equitable access to economic reintegration opportunities in natural resource sectors. As part of the pre-programme assessments, a specific gender analysis, carried out in consultation with both female and male participants and

community members, needs to be undertaken in order to map the gender-specific roles and responsibilities in natural resource management and gender division of labor. Based on the analysis, DDR programmes should promote the equal participation and decision making opportunities of female and male participants and beneficiaries in natural resource management.

#### 4.3. Develop national and local capacity to address NRM issues

Available national and local capacity (i.e. local government, private sector, civil society organisations) to recognize, raise awareness and address the linkages between natural resources and DDR is essential to ensure that risks and opportunities are adequately incorporated into programming. Moreover, increasing national institutional capacity can strengthen governance and equitable distribution of natural resources. The UN Secretary-General's 2010 report on *Peacebuilding in the immediate aftermath of conflict* singled out the "serious gap in national capacities to ensure a stable transition from conflict to sustainable peace and development," and cited the relevance of developing guidance and training programmes on the management of natural resources. DDR programme managers should establish relevant and appropriate partnerships to make available technical assistance on natural resource issues to programme staff and partners through expert consultations, staff training, and resource guides and toolkits.

# 4.4. Use natural resource management as a platform for reconciliation and trust building between communities

Community groups and forums that bring community members and reintegration participants together to discuss the management of natural resources represent an important opportunity to further achieve reconciliation and enhance peacebuilding. Support to these community groups and local authorities from relevant line ministries in natural resource management sectors can further strengthen their capacities and foster stakeholder buy-in.

# 4.5. Take into account national legislation and international sanctions, and incorporate good governance practices and transparent management of natural resources

Where applicable and feasible, DDR managers should ensure that team members are informed of not only local and national laws and policies regarding the management and trade of natural resources, but also the international community's role in minimizing or augmenting the potential for these resources to finance, sustain or reignite conflict. DDR personnel should closely analyze and incorporate any relevant international sanctions and appropriate natural resource certification schemes into DDR programme planning and implementation. In dealing with the linkages between natural resources and conflict, legislation and policies should also be considered from a cross-border and regional perspective, as changes in natural resource management and trade in one country may greatly impact bordering countries (i.e. market incentives that may lead to increased smuggling and illicit cross-border trade, etc.).<sup>16</sup>

#### 4.7. Incorporate natural resource sustainability measures into reintegration programming

Where possible and appropriate, reintegration programmes should seek to adopt livelihoods strategies and employment generation opportunities that promote sound natural resource management, participatory decision-making, conflict sensitivity and that do not use resources faster than they can be replenished naturally. DDR programme managers should focus on promoting sustainable livelihoods and consider incorporating environmental feasibility studies for any projects based around natural resources and ensure that post-project impact monitoring and evaluation includes the environment, natural resources and ecosystem services. Reintegration programmes should aim to integrate both impact and livelihoods opportunities in pre-programme assessment or use available information from other context assessments. This is particularly important where extractive industries are present or where infrastructure at specific sites may result in cumulative environmental impacts of programme activities could impact on health and livelihoods, such as in the petroleum extraction or mining sectors.

### 5. International mandates and responsibilities

# 5.1. Third Report of the Secretary-General on "Disarmament, demobilization and reintegration" of 21 March 2011 (A/65/741)

The 2011 Report of the Secretary-General on DDR identifies trafficking in natural resources as a "key regional issue affecting the reintegration of ex-combatants," and specifically refers to natural resource management as an emerging issue that can contribute to the sustainability of reintegration programmes if properly addressed.

# 5.2. Resolution adopted by the General Assembly on "Observance of environmental norms in the drafting and implementation of agreements on disarmament and arms control" of 13 January 2011 (A/RES/65/53)

This General Assembly resolution underlines "the importance of the observance of environmental norms in the preparation and implementation of disarmament and arms limitation agreements" and reaffirms that the international community should contribute to ensuring compliance with relevant environmental norms in negotiating treaties and agreements on disarmament and arms limitation. It further calls on "all States to adopt unilateral, bilateral, regional and multilateral measures so as to contribute to ensuring the application of scientific and technological progress within the framework of international security, disarmament and other related spheres, without detriment to the environment or to its effective contribution to attaining sustainable development."

# 5.3. Report of the Secretary-General on "Women's participation in peacebuilding" of 7 September 2010 (A/65/354 - S/2010/466)

The report calls on all peacebuilding actors to "ensure gender-responsive economic recovery" through "the promotion of women as 'front-line' service-delivery agents," including in the areas of "agricultural extension and natural resource management."

### 5.4. Report of the Secretary-General on "Peacebuilding in the immediate aftermath of conflict" of 16 July 2010 (A/64/866–S/2010/386)

In this report, the Secretary-General notes that "greater efforts will be needed to deliver a more effective United Nations response" in the area of natural resources, and he "call[s] on Member States and the United Nations system to make questions of natural resource allocation, ownership and access an integral part of peacebuilding strategies."

## 5.5. United Nations Policy for Post-Conflict Employment Creation, Income Generation and Reintegration (2009)

The Policy notes the importance of addressing "root causes of conflict such as inequitable access to land and natural resources" through the use of "fiscal and redistributive incentives to minimize social tensions" during the reintegration process. It further suggests:

- diversifying away from natural resource exports by expanding labour-intensive exports and tourism;
- implementing cash-for-work projects in relevant agricultural and natural resource sectors in rural areas;
- engaging traditional authorities in dispute resolution, particularly with regard to access to property and other natural resources (such as forestry, fishing and grazing land); and
- implementing labour-intensive infrastructure programmes to promote sustainable agriculture, including restoration of the natural resource base, while simultaneously emphasizing social acceptance and community participation.

# 5.6. Security Council "Resolution 1509 (2003)" on Liberia (S/RES/1509); "Resolution 1565 (2004)" on DRC (S/RES/1565); and "Resolution 1856 (2008)" on DRC (S/RES/1856)

These resolutions share an emphasis on the link between armed conflict and the illicit exploitation and trade of natural resources, categorically condemning the illegal exploitation of these resources and other sources of wealth:

- In resolution 1509 (2003), the UN Peacekeeping Mission in Liberia was called upon to assist the transitional government in restoring the proper administration of natural resources;
- Resolution 1565 (2004) "urge[s] all States, especially those in the region including the Democratic Republic of the Congo itself, to take appropriate steps in order to end these illegal activities, including if necessary through judicial means ... and exhort[ed] the international financial institutions to assist the Government of National Unity and Transition in establishing efficient and transparent control of the exploitation of natural resources;"
- "Recognizing the link between the illegal exploitation of natural resources, the illicit trade in such resources and the proliferation and trafficking of arms as one of the major factors fuelling and exacerbating conflicts in the Great Lakes region of Africa, and in particular in the Democratic Republic of the Congo," Security Council Resolution 1856 (2008) decided that the UN Peacekeeping Mission would work in

close cooperation with the Government in order to, among other things, execute the "disarmament, demobilization, monitoring of resources of foreign and Congolese armed groups," and more specifically, "use its monitoring and inspection capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources."

# 5.7. Report of the Secretary-General entitled *Progress report on the prevention of armed conflict* of 18 July 2006 (A/60/891)

The Secretary-General's progress report notes that "The most effective way to prevent crisis is to reduce the impact of risk factors ... These include, for instance, international efforts to regulate trade in resources that fuel conflict, such as diamonds ... efforts to combat narcotics cultivation, trafficking and addiction ... and steps to reduce environmental degradation, with its associated economic and political fallout. Many of these endeavours include international regulatory frameworks and the building of national capacities."

In addition he emphasizes more specifically that, "Environmental degradation has the potential to destabilize already conflict-prone regions, especially when compounded by inequitable access or politicization of access to scarce resources," and "urge[s] Member States to renew their efforts to agree on ways that allow all of us to live sustainably within the planet's means." He encourages, among other things, implementing programmes that "can also have a positive impact locally by promoting dialogue around shared resources and enabling opposing groups to focus on common problems."

# 5.8. UNDG-ECHA Guidance Note on Natural Resource Management in Transition Settings (January 2013)<sup>17</sup>

This note provides guidance on policy anchors for NRM in transition settings, key guiding questions for extractive industries, renewable resources and land to help understand their existing and potential contribution to conflict and peacebuilding, and describes entry points where these issues should be considered within existing UN processes and tools. It also includes annexes, which highlight tools, resources and sources of best practice and other guidance for addressing natural resource management challenges in transition settings.

#### 5.9. Relevant Certification Schemes, Standards, Guidelines and Principles

#### 5.9.1. Extractive Industries Transparency Initiative (EITI)<sup>18</sup>

The EITI is a coalition of governments, companies, civil society groups, investors and international organizations that has developed an international standard for transparent reporting on revenues from natural resources. With the EITI, companies publish what they pay and governments publish what they receive in order to encourage transparency and accountability on both sides. The process is overseen by a multi stakeholder group of governments, civil society and companies that provides a forum for dialogue and a platform for broader reforms along the natural resources value chain.

#### 5.9.2. Food and Agriculture Organization of the United Nations Land Tenure Guidelines<sup>19</sup>

The purpose of these guidelines is to serve as a reference and provide guidance to improve the governance of tenure of land, fisheries and forests with the overarching goal of achieving food security for all. The Guidelines have a particular focus on the linkages between tenure of land, fisheries and forests with poverty eradication, food security and sustainable livelihoods, with an emphasis on vulnerable and marginalized people. They mention specific actions that can be taken in order to improve tenure for land, fisheries and forests, especially for women, children, youth and indigenous peoples, as well as for the resolution of disputes, conflicts over tenure, and cooperation on transboundary matters. The Guidelines are voluntary.

5.9.3. Pinheiro Principles on Housing and Property Restitution for Refugees and Displaced Persons<sup>20</sup> The Pinheiro Principles on Housing and Property Restitution for Refugees and Displaced Persons were endorsed by the United Nations Sub-Commission on the Promotion and Protection of Human Rights on 11 August 2005 and are firmly established on the basis of international humanitarian and human rights law. The Principles provide restitution practitioners, as well as States and UN agencies, with specific policy guidance relating to the legal, policy, procedural, institutional and technical implementation mechanisms for housing and property restitution following conflicts, disasters or complex emergencies. While the principles are focused on housing, land and property (HLP) rights, they also refer to commercial properties, including agricultural and pastoral land. They also advocate for the inclusion of HLP issues in peace agreements and for appeals or other humanitarian budgets.

### 6. Rationale for linking DDR and natural resource management<sup>21</sup>

Identifying the role of natural resources in conflict is integral to effectively addressing the factors that may have caused or sustain conflict, trigger a relapse of violence or impede the process of consolidating peace. Analyses and assessments on environmental and natural resource issues can further demonstrate the ways in which natural resources are intentionally and/or inadvertently utilized, exploited, depleted and destroyed in the conflict and post-conflict periods.

The UN has only recently adopted guidance on integrating natural resource considerations into its peacebuilding assessments and interventions.<sup>22</sup> Yet in practice, sustainable natural resource management is still too often considered as an issue to be addressed at a later stage in the recovery or peacebuilding process. However, doing so fails to take into account the broad and changing nature of threats to national and international security. Integrating natural resource issues into peacebuilding – and DDR programming in particular – should be seen as a security imperative following the strong linkages between NRM and conflict. Deferred action or poor choices made early on often establish unsustainable trajectories of recovery that can undermine long-term peace and stability. At the same time, NRM offers important opportunities for sustainable livelihoods recovery, employment creation and reconciliation.

The following sections will seek to clarify the relationship between natural resources, armed conflict and its aftermath with the DDR process by looking at: i) the role of natural resources in conflict; ii) the relationship between natural resources and armed groups in conflict; and iii) the role of natural resources in reintegration.

#### 6.1. The role of natural resources in conflict

The relationship between natural resources, the environment and conflict is multidimensional and complex, but three principal pathways can be drawn:

- Contributing to the outbreak of conflict: Attempts to control natural resources or
  grievances caused by inequitable resource benefit sharing or environmental degradation can contribute to the outbreak of violence. Countries that depend on the export of
  a narrow set of primary commodities may also be more vulnerable to conflict, as they
  are less able to absorb economic shocks in the global markets of these commodities;
- 2. Financing and sustaining conflict: Once conflict has broken out, extractive "high-value" resources may be exploited to finance armed forces and groups, or become strategic considerations in gaining territory. In such cases, the duration of conflict is extended by the availability of new sources of financing, or complicated by efforts to gain control over resource-rich areas;
- 3. Undermining peacemaking: The prospect of a peace agreement may be undermined by individuals or splinter groups that could lose access to the revenues generated by illicit resource exploitation if peace were to prevail. Once a peace agreement is in place, the exploitation of natural resources can also threaten political reintegration and reconciliation by providing economic incentives that reinforce political and social divisions.

According to Global Witness, in conflict settings, natural resources, such as minerals, precious gems, timber, illicit crops or agricultural commodities become "conflict resources" when their "systematic exploitation and trade in a context of conflict contribute to, benefit from or result in the commission of serious violations of human rights, violations of international humanitarian law or violations amounting to crimes under international law."<sup>23</sup> These conflict resources may be exploited by various actors during conflict, including government entities, criminal networks, corrupt leaders and others. While some of these actors may use natural resource wealth to directly finance conflict, others may simply take advantage of the regulatory vacuum to exploit natural resources for personal gain. A full understanding of these dynamics will help DDR practitioners to make informed decisions regarding programming.

#### 6.2. The relationship between natural resources and armed groups in conflict

Armed forces and groups have frequently relied on the exploitation of natural resources to finance war efforts and to attract recruits. Grievances over inequitable natural resource allocation, distribution and control, both real and perceived, can also motivate individuals to join in the fighting, in addition to exacerbating already existing tensions between ethnic groups, political factions and others.

Figure 2 Natural resources and participation in violent conflict



Members of armed forces and groups may also exploit natural resources out of need and survival, given the limited alternative options during conflict. This is most often seen in areas where there are easily extractable or "lootable" natural resources and where government authority is weak. Such circumstances easily lend themselves to the development of splinter groups, which may lead to a multiplicity of armed groups and further complicate prospects for a successful peace agreement.

In contexts where lootable natural resources abound, DDR programmes may find it challenging to secure the participation of members of armed forces and groups whose activities are financed through highly profitable resources. However, there is an increasing trend towards including natural resource provisions in peace agreements and that natural resources can support various aspects of peacebuilding. They also offer a unique platform and entry point to engage local communities and restore sustainable livelihoods. Where natural resources fuelled or financed conflict, peacekeeping missions should be given a more systematic mandate to support national authorities in restoring the administration of natural resources, and that DDR programmes should systematically consider emergency employment and sustainable livelihoods based on natural resources and the environment. 24

To secure a strategic advantage, demoralize local populations or subdue resistance, leaders and members of armed forces and groups may pollute water wells, burned crops, cut down forests, poison soils and kill domestic animals. In some cases, entire ecosystems have been deliberately targeted to achieve political and military goals. While there are numerous other examples of natural resource destruction being used as a weapon of war, most of the environmental damage that occurs in times of conflict is collateral, or related to the preparation and execution phases of war and to the coping strategies of local populations.

DDR programmes cannot reverse many of these deliberate and collateral impacts of conflict. However, through proper analysis, planning and support of sustainable practices and good governance, they can support repairing essential damages to ensure that environmental degradation, health and livelihoods risks are not further inflicted upon the communities and areas in which they work. Environmental degradation impacts directly on host communities, which are heavily reliant upon natural resources for their livelihoods that are also essential for sustainable reintegration.

For more detailed information on the relationship between natural resources, conflict and peacebuilding, see *From Conflict to Peacebuilding: the Role of Natural Resources and the Environment* (UNEP, 2009); *The Role of Natural Resources in Disarmament, Demobilization and Reintegration Programmes: Addressing Risks and Seizing Opportunities* (UNEP and UNDP, 2013); *Women and Natural Resources: Unlocking the Peacebuilding Potential* (UNEP, UNDP, UN Women and PBSO, 2013).

#### 6.3. Peace negotiations

Conflicts associated with natural resources are more likely to relapse into conflict in the first five years. Benefit sharing, whether of minerals, land, timber or water resources, can be a make-or-break aspect of peace negotiations. Despite this, however, less than a quarter of peace negotiations aiming to resolve conflicts linked to natural resources have established resource management mechanisms.<sup>25</sup>

The parameters for DDR programmes are often set during peace negotiations. Thus, in conflicts where armed forces and groups use natural resources as a means of financing conflict or where they act as an underlying grievance for recruitment, natural resources should also be included in peace agreements. It is important to carefully analyze how the conflict ended, to note if it was a military victory, a peace settlement, or otherwise, as this will have implications for how natural resources (especially land) might be distributed after the conflict ends. It is important to ensure that women's voices are also included in this, as they will be essential to the implementation of any peace agreement and especially to the success of DDR at the community level. Research shows that women consistently prioritize natural resources as part of peace agreements and therefore their inputs should specifically be sought on this issue.<sup>26</sup>

The following table offers relevant natural resource issues to address during peace negotiations and presents plausible outcomes for DDR programmes to consider.

See IDDRS Module 2.20 for further guidance on DDR in Post-conflict Stabilization, Peacebuilding and Recovery Frameworks. Further resources on natural resources in peace negotiations include: *Negotiating natural resources for peace* (Haysom and Kane, Humanitarian Dialogue Centre, 2009) and *Mediating Natural Resource Conflicts: Guidance for Mediators and Mediation Practitioners* (United Nations Department of Political Affairs Mediation Support Unit and the United Nations Environment Programme, forthcoming in 2014).

2.20 ◀ ▷

#### NATURAL RESOURCES IN PEACE NEGOTIATIONS AND AGREEMENTS

Issues to raise during peace negotiations

- Equitable tenure, access and use of natural resources.
- Wealth-sharing arrangements for natural resources.
- Participatory/joint management of natural resources, including considerations of gender-specific priorities and, if appropriate, CBNRM.
- Reparations and/or compensation for degraded natural resources for affected communities.
- Curbing illicit access to natural resources by armed forces and groups and communities, where relevant.

Possible outcomes following inclusion of natural resource issues in peace agreements

- Leaders of armed groups may be less likely to instigate further conflict if grievances related to unequal access to wealth from natural resources are addressed.
- Natural resource governance may become the responsibility of new leadership and a possible component of political reintegration.
- Strategic ecosystems that are essential for livelihoods and sustainable development will be more readily protected.
- Non-state actors may be less likely to gain access to resources for future conflict.
- Reparations and/or compensation for degraded natural resources may support conflict resolution and reconciliation, in addition to paving the way for reintegration and recovery.
- Natural resources may become a basis for confidence building between divided communities.

#### 6.4. The role of natural resources in peacebuilding and recovery

The previous sections have shown that the struggle for control of natural resources can be an important contributing factor for armed forces and groups to play a role in the outbreak of conflict, in financing and sustaining conflict, and in spoiling peacemaking prospects. At the same time, the environmental impacts of conflict may have detrimental effects on health and livelihoods that can further undermine peacebuilding and reintegration efforts. Moreover, increasing demand for resources, population growth and environmental stresses including climate change will likely compound these problems and increase risks.

In addition to these key risk factors, the following are three compelling ways in which natural resource management and the environment can be linked to peacebuilding, and more specifically to DDR efforts, in particular reintegration:<sup>27</sup>

Supporting economic recovery: When natural resources are properly governed and carefully managed, "high-value" resources (such as hydrocarbons, minerals, metals, stones and export timber) can form an important basis for employment creation and budget revenue for development. The risk, however, is that the pressure to kick-start

- development and earn foreign exchange can lead to rapid, uncontrolled exploitation of such resources at sub-optimal prices, without due attention to environmental sustainability, employment creation and the equitable distribution of revenues. When the benefits are not shared, or when environmental degradation occurs as a consequence of exploitation, there could be serious potential for conflict to resume. Other natural resources, including land and agriculture, are key sectors for reintegration that can be supported;
- **Developing sustainable livelihoods:** Durable peace fundamentally hinges on the development of sustainable livelihoods, the provision of basic services, and on the recovery and sound management of the natural resource base. Environmental damage caused by conflicts, coping strategies and chronic environmental problems that undermine livelihoods must therefore be addressed from the outset. Minimizing vulnerability to natural hazards and climate change through the management of key natural resources and the introduction of appropriate technologies may also be addressed. Women and children are often disproportionally affected by environmental contamination economically, socially as well as in terms of their health and well-being. Reintegration programmes should therefore seek to address the specific needs of women and children in relation to their dependence on natural resources and risks involved. Careful coordination and attention to issues of land access, tenure and to the availability of agricultural inputs and access to financing are also critical elements for ensuring success and sustainability. Women, and especially unmarried women and women who are not closely associated with a male relative, are often disadvantaged in regard to access to many capital assets, as women's ownership rights are often based on de facto agreements through male community members and traditional gender roles may prevent women and girls from accessing education and capacity building;
- 3. Contributing to dialogue, reconciliation and confidence building: The environment can be an effective platform (i.e. 'neutral entry point') or catalyst for enhancing dialogue, building confidence, exploring shared interests and broadening cooperation between divided communities as well as within and between states. Such actions should aim to use an inclusive approach that seeks to consider and respond to the needs of the entire population, especially women and youth. Bring communities together to discuss and resolve common challenges and concerns, such as access to water points and grazing lands, can be a powerful peacebuilding tool and can help to mitigate the risk of further conflict between competing natural resource user groups.

Addressing the involvement of ex-combatants and associated groups in the exploitation of natural resources requires not only promotion of alternative livelihoods, but also the strengthening of State authority and governance mechanisms that are responsive to local needs. Improving and supporting good governance and management practices of natural resources is crucial to ensuring that they can be harnessed to support basic livelihoods and employment creation for successful reintegration and avoid negative environmental impact. DDR practitioners should work jointly with livelihoods, community security, rule of law and community violence reduction programmes to ensure that all are aware of the potential risks and opportunities related to natural resources and that the issues are being addressed coherently.

To further support social reintegration and reconciliation, as well as to enhance peacebuilding, DDR managers and reintegration officers should seek to support reintegration activities that empower communities affected by natural resource issues, applying community-based natural resource management (CBNRM) approaches where applicable and promoting inclusive approaches to natural resource management. Ensuring that specific needs groups such as women and youth receive equitable access to and opportunities in natural resource sectors is especially important, as they are essential to ensuring that peacebuilding interventions are sustainable in the long-term.

### 7. Planning factors

The following section will provide guidance on integrating natural resource management in DDR planning, from the pre-programme assessments, such as conflict and security analysis, to programme design and implementation, monitoring and evaluation, as well as strengthening of national and local capacities and exit strategies.

#### 7.1. Conflict and security analysis

During the pre-planning and preparatory assistance phase, DDR planners should clarify the role natural resources may have played in the conflict, if any. In particular, planners should identify the key natural resources involved in addition to key individuals, armed forces and groups, organizations and/or governments who may have used (or continue to use) these particular resources to finance or sustain the conflict. The analysis should also consider gender aspects through looking specifically into the sex- and age- disaggregated impacts of natural resource conflicts or grievances on female ex-combatants and associated groups. A conflict economy lens is useful for identifying the actors and elements for this analysis, as described in the figure below.

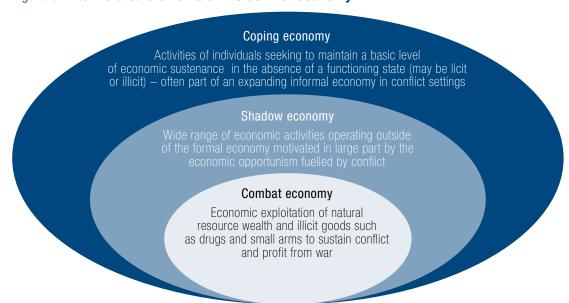


Figure 3: Inter-related elements of the conflict economy<sup>28</sup>

If it is determined that natural resources have played (or continue to play) a critical role, analyses should seek to identify:

- key financial and strategic benefits and drawbacks of the identified resources on all warring parties and civilian populations affected by the conflict;
- the nature and extent of grievances over the identified natural resources (real and perceived), if any;
- the location of implicated resources;
- the role of sanctions in deterring illegal exploitation of natural resources;
- the extent and type of resource depletion and environmental damage caused as a result of mismanagement of natural resources during the conflict;
- displacement of local populations;
- cross-border activities regarding natural resources;
- linkages to criminal networks (see Figure 2 on the conflict economy);
- analyses of different actors in the conflict and their relationship with natural resources (see table on key actors below).

KEY ACTORS AND THEIR LINKAGES TO NATURAL RESOURCES DURING ARMED CONFLICT			
Key actors	Linkages to natural resources		
Government and national armed forces	<ul> <li>Selling of land, timber, endangered species or mineral resources.</li> <li>Corruption within state institutions and possible grievances over natural resource benefits.</li> </ul>		
Armed groups (insurgents and paramilitary)	<ul> <li>Use of natural resources to finance conflict activities and arms acquisition (often controlled by high-level leaders) and for grievances and recruitment.</li> </ul>		
Private sector (national, regional and international), regional and international organizations	<ul> <li>May be involved in purchasing or extorting natural resources or obtaining questionable concessions for natural resource exploitation.</li> </ul>		
Conflict-affected civilian populations and groups (including civil society organizations)	<ul> <li>Access to valuable resources for livelihoods may be restricted by armed forces and groups.</li> </ul>		
	May participate willingly or be forced to participate in the extraction of natural resources.		
	May participate willingly or be forced into illicit trade networks.		
	May be forced to pay informal taxes to armed forces and groups for producing or trading natural resources.		

The conflict and security analysis should seek to achieve two main objectives regarding natural resources. First, it should thoroughly analyze the role that natural resources have played in contributing to the outbreak of conflict (i.e. through grievances), how they have fuelled or financed the conflict and how natural resources that are essential for livelihoods have been degraded or damaged due to the conflict (i.e. backwards linkages). Secondly,

analyses should look forward towards any potential conflicts or relapse into conflict that could occur as a result of unresolved grievances, competition or disputes over natural resources during reintegration and recovery, and the risk of former combatants joining ranks with criminal networks to continue exploiting natural resources (i.e. forwards linkages). Once these elements have been identified, and the potential consequences of such analysis are fully understood, DDR practitioners can seek to explicitly address them through programming.

Figure 4. Implications of natural resources for DDR conflict and security analysis

Backward linkages: Conflict, natural resources and armed forces / groups Conflict and Security Analysis: DDR and natural resource linkages

Forward linkages:
Potential for natural resources
to contribute to peacebuilding
or conflict relapse

#### CONFLICT AND SECURITY ANALYSIS: SAMPLE NRM QUESTIONS

- Is scarcity of natural resources or unequal distribution an issue? How are different social groups able to access natural resources differently?
- What are the roles, priorities and grievances of women and men of different ages in regard to management of natural resources?
- Did grievances over natural resources originally lead combatants to join or to be recruited into armed forces or groups? What about the grievances of associated groups, in particular for women or youth? Were these grievances addressed when the conflict ended or in the peace agreement?
- Is the political position of one or more of the parties to the conflict related to access to natural resources or to the benefits derived from them?
- Has access to natural resources supported the chain of command in armed forces or groups? How has natural resource control allowed for political or social gain over communities and the State?
- Who are the main local and global actors involved in the conflict and what is their relationship to natural resources?
- Have armed forces and groups maintained or splintered? How are they supporting themselves?
- How have natural resources been leveraged to control the civilian population?
- Has the conflict stopped or seriously impeded economic activities in natural resource sectors, including agricultural production, forestry, fisheries, or extractive industries? Are there issues with parallel taxation, smuggling, or militarization of supply chains? What populations have been most affected by this?
- Has the conflict involved land-grabbing or other appropriation of land and natural resources?
   Have groups with specific needs, including women and youth, been particularly affected?
- What have been the social impacts on the populations affected by the degradation or exploitation of natural resources during the conflict?
- Have conflict activities led to the degradation of key natural resources, for example through deforestation, pollution or erosion of topsoil, contamination or depletion of water sources, destruction of sanitation facilities and infrastructure, or interruption of energy supplies?
- Are there foreseeable effects (i.e. risks and opportunities) of natural resource management on the reintegration of female ex-combatants and women formerly associated with armed forces? and groups that are different from those affecting male ex-combatants? And for youth?

This analysis can be completed through desk reviews (i.e. using reports from government, UN agencies, NGOs and media) and field assessments. An assessment mission can help to collect the necessary background information for analysis. The role of natural resources in the political and security factors affecting the planning of DDR should be duly considered. The responses to these guidance questions will identify some of the key areas where DDR planners and managers may target reintegration activities in natural resources sectors. It will also help to identify the role of the UN in addressing such issues, including in DDR. This analysis should complement a post-conflict needs assessment that also identifies the main social and physical needs of the conflict-affected populations, as well as the impact of the conflict to traditional knowledge related to the management of natural resources.

Once an analysis has been completed, it will be clear which planning and implementation partners DDR programmes will need to provide the technical advice necessary to address natural resources. When planning and implementation partners have been identified, DDR programme managers should ensure that there is staff dedicated to follow up and support natural resource-related aspects of the DDR programme in collaboration with all relevant partners.

Many DDR programmes already use natural resources in the reintegration of former fighters and associated groups. Without recognizing the potential risks and adopting adequate safeguards, either within the DDR programme or through partners, reintegration programmes could have negative impacts on natural resources and peacebuilding processes. The following table outlines many of these risks and potential safeguard measures that can be put in place to mitigate them.

Further resources on incorporating natural resources into conflict analysis include: *Placing environment and natural resource risks, impacts, and opportunities on the post-conflict peacebuilding agenda.* In "Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding", (2013). ed. D. Jensen and S. Lonergan. London: Earthscan; *United Nations Development Group Guidance Note on Natural Resource Management in Transition Settings* (UNDG-ECHA, 2013).

NATURAL RESOURCE SECTOR	RISK	SAFEGUARD
Land	<ul> <li>Lack of access to land</li> <li>Weak tenure rights</li> <li>Conflicts over land and tenure rights</li> <li>Lack of access to productive capital</li> </ul>	<ul> <li>Document access to land in profiling</li> <li>Identify existing grievances over land and refer to appropriate authority</li> <li>Link with appropriate support programmes for women who lack access to land</li> </ul>
Agriculture	<ul> <li>In appropriate species used for agriculture</li> <li>Lack of extension services, inputs and credits</li> <li>Lack of access to markets</li> <li>Unclear tenure over grazing lands and water points</li> </ul>	<ul> <li>Define clear access points for livestock</li> <li>Coordinate with extension services to ensure access to appropriate inputs is guaranteed</li> <li>Review all species used by a local biologist/ecologist</li> <li>Link with microfinance initiatives and focus on restoring markets through infrastructure projects</li> </ul>

NATURAL RESOURCE SECTOR	RISK	SAFEGUARD
Fisheries	<ul> <li>Over exploitation of stock</li> <li>Competition over access</li> <li>Lack of access by women and other vulnerable groups</li> <li>Lack of access to capital to improve the processing and storage of catch</li> </ul>	<ul> <li>Establishment of clear fishing zones and rights</li> <li>Support for the establishment or revitalization of organizational system to track and manage catch quantities</li> <li>If appropriate, support the establishment of cooperatives for fishermen and for women working in the processing and transformation of catch</li> <li>Support the revitalization of markets for selling</li> </ul>
Forestry	<ul> <li>Exploitation and illegal sale by armed groups or criminal gangs</li> <li>Over-harvesting and unsustainable exploitation</li> <li>Land tenure conflicts and rights to forest areas</li> <li>Lack of access to forests for essential materials (i.e. fuel wood and medicinal plants)</li> </ul>	<ul> <li>Work with the Ministry of Forestry to link with any established community forest management committees</li> <li>Determine potential conflicts over forest resources during profiling</li> <li>Determine essential needs in terms of forest resources during profiling</li> <li>Support forest patrols to discourage illegal logging</li> <li>Work with local authorities to determine needs and access rights for women and other vulnerable groups</li> </ul>
Mining	<ul> <li>Occupation and control by armed groups</li> <li>Extortion and forced labor of local populations</li> <li>Lack of access to legal markets</li> <li>Lack of regulatory mechanisms to guarantee efficient functioning of points of sale</li> </ul>	<ul> <li>Request for protection of mining areas by peacekeeping troops or local security sector where possible and appropriate</li> <li>Collaboration with human rights units in government and peacekeeping missions where possible to track and document any human rights abuses occurring in mines</li> <li>Support the establishment of legal, transparent points of sale around mines</li> </ul>

#### 7.2. Reintegration assessments

Assessments should seek to gather information on the opportunities and risks associated with natural resources to inform employment and livelihoods programmes. This data can also be used to identify potential reconciliation and conflict resolution activities around natural resources that could be included in the design of reintegration programmes. Assessments should, amongst others, reflect on the demand for natural resources and any derived products in local, regional, national and international markets, as well as existing and planned private sector activity in natural resource sectors. It should also consider any areas environmentally degraded or damaged as a result of the conflict that can be rehabilitated and strengthened through quick-impact projects during reinsertion. DDR planners should seek to incorporate information gathered in Strategic Environmental Assessments

(SEAs), UNEP's Post-Conflict Environmental Assessments and Environmental and Social Impact Assessments (EIAs/ESIAs) where appropriate and possible, to avoid unnecessary duplication of efforts.

When planning for the assessment phase, the results of the conflict and security analysis and identified role of natural resources in the conflict and operations of armed forces and groups should be considered to define the assessment objectives, indicators, methodology, risks and assumptions. When feasible, DDR practitioners should try to ensure the inclusion of natural resource issues into socio-economic opportunity mapping exercises and profiling exercises for reintegration planning. Any remaining gaps in knowledge can be filled through detailed field assessments with appropriate technical partners.

#### UNDP SIX PILLARS OF SUSTAINABLE LIVELIHOODS<sup>29</sup>

Natural resources play an important role in post-conflict livelihood creation. When making assessments for reintegration opportunities, the five building blocks of sustainable livelihoods should be considered:

- Human capital includes person's skills, knowledge, experience, and capacities);
- Natural capital consists of natural resources such as water, land, forests, and minerals;
- Physical capital refers to available infrastructure, such as water and sanitation facilities, information and communication technology, housing, schools, health facilities, and other community and government structures;
- Financial capital includes savings, credit, remittances, enterprise holdings, insurance, pensions, and livestock;
- Political capital refers to access to and participation in decision making processes);
- Social capital includes networks, group memberships, and social relationships.

Capital assets are easily lost, destroyed or stolen during conflict and in a post-conflict environments. Reintegration assessments should consider the opportunities and vulnerabilities relating to the availability of these capital assets for different groups in conflict contexts, as well as the effect that they have on livelihood-related needs, choices and strategies.

INCLUDING NATURAL RESOURCES IN REINTEGRATION ASSESSMENTS: QUESTIONS TO CONSIDER		
Ex-Combatant Profiling	Early profiling and pre-registration surveys	<ul> <li>Motivations for joining armed forces and groups linked to natural resources</li> <li>Potential areas of return and likely livelihoods options to identify potential natural resource sectors to support</li> <li>The use of natural resources by the members of armed forces and groups to identify potential hot spots</li> </ul>
	Full profiling and registration of excombatants	<ul> <li>Job/vocational skills in different natural resource sectors</li> <li>Economic activities already undertaken prior to joining or while with armed forces and groups in different natural resource sectors</li> <li>Interest to undertake economic activities in natural resource sectors</li> </ul>

INCLUDING NATURAL RESOURCES IN REINTEGRATION ASSESSMENTS: QUESTIONS TO CONSIDER		
Reintegration Opportunities	Identification and assessment of areas of return or resettlement	<ul> <li>Key natresources/ecological risks and opportunities</li> <li>Potential for conflicts over access and tenure over land and natural resources</li> <li>Access by women to land and other assets for reintegration</li> </ul>
	Community perception surveys	<ul> <li>Community perceptions on the role of members of armed forces and groups in scarcity or degradation of natural resources</li> <li>Community access to natural resources and identification of potential conflict areas</li> <li>Community perceptions on employment opportunities in different natural resource sectors</li> <li>Gendered division of labor and the priorities and grievances of female and male community members in regard to the use of natural resources</li> </ul>
	Labor market assessments	<ul> <li>Potential natural resource sectors for the creation of employment opportunities</li> <li>Potential natural resource value chains that can create employment and lead to economic reintegration</li> <li>Identified roles for women and youth who are at risk of recruitment in natural resource sectors</li> </ul>
Service Providers	Services mapping and capacity assessment	<ul> <li>Overall natural resource management capacities and vulnerabilities within potential implementing partners, including the public sector, NGOs and civil society</li> <li>Expertise in key natural resource sectors in national and international organizations</li> </ul>

Where applicable, DDR managers should ensure that assessments include technical experts from UNEP, FAO, UN HABITAT and/or other experts on land and natural resources who can successfully incorporate key natural resource issues into DDR programming. These technical experts should display expertise in also recognizing the social, psychological and economic livelihoods issues connected to natural resources to be able to properly inform programme design.

The participation of local organizations and groups with knowledge on natural resources will also aid in the formation of a holistic perspective during the assessment phase. In addition, special attention should be given to gathering any relevant information on issues of access to land and natural resources, especially for women and youth.

In areas where there is access to lootable natural resources, DDR programmes should be careful to analyze inequitable and/or competing access to natural resources and the potential for this to contribute to conflict reoccurrence. The results of conflict and security analyses can be used to inform a risk analysis using a conflict sensitivity lens, including the possibility of natural resources to be used by splinter groups or to fuel a relapse into conflict, risk of capture of key geographical areas by armed groups, the possibility of forced labor and exploitation of the civilian population by members of armed groups, or potential risks of the scarcity or poor conditions of natural resources to negatively impact the sustainability of the livelihoods interventions themselves.

For further guidance on integrating natural resources and environmental issues in assessments see: UNDG-ECHA Guidance Note on Natural Resources in Transition Settings (UNDP, 2013); Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach (UNEP, 2004).

RISKS FOR DDR FROM ARMED GROUPS FINANCING THROUGH NATURAL RESOURCES			
International Intervention	Risk to DDR programme success		
<ul><li>Sanctions (on one or more natural resources);</li></ul>	<ul> <li>Sanction busters may continue to trade arms for natural resources with armed groups;</li> </ul>		
<ul> <li>Mandated monitoring and enforcement of trade in natural resources by national security forces and peacekeepers;</li> <li>Certification of Origin for trade in natural resources (i.e., Kimberly Process for</li> </ul>	<ul> <li>Poor monitoring and enforcement by national security forces can lead to continued control of geographic areas by armed groups and continued risk of violence for surrounding communities, including forces labor or security threats for those who rely on access to natural resources for their livelihoods (e.g. women and girls collecting firewood or fetching water;</li> <li>Continuation of the conflict economy and a potential higher risk of relapse into conflict.</li> </ul>		
diamonds).	oi reiapse into conflict.		

#### 7.3. Programme design and implementation

To incorporate natural resources into programme design and implementation, DDR practitioners should ensure that technical capacities on natural resource issues exist in support of DDR, within DDR teams or national DDR structures (i.e. national government and military structures where appropriate) and/or are made available through partnerships with relevant institutions or partners. This may be done through the secondment of experts, providing training on natural resources and through consulting local partners, such as NGOs or civil society organizations.

During the development of programme documents, risks and opportunities identified as part of the assessment process should be factored into the overall strategy for the programme. This can be accomplished by working closely with government institutions and relevant line ministries responsible for agriculture, land distribution, forestry, fisheries, minerals and water, as well as civil society, relevant NGOs and local and international private sector, where appropriate. DDR practitioners should ensure that all major risks for health, livelihoods and infrastructure, as well as disaster-related vulnerabilities of local communities and especially groups such as women and youth, are identified and addressed in programme design and implementation. This is especially important

for extractive industries such as mining and forestry, where government contracts and concessions that are being negotiated will impact local areas and communities. Private sector entities are increasingly pressured to conform to due diligence and transparency standards that seek to uphold human rights, labour rights and sustainable development principles. Local traditional knowledge about natural resource management should also be sought and built into the reintegration strategy as much as possible.

Finally, DDR practitioners should seek to link reinsertion and reintegration activities that involve natural resources as much as possible in order to ensure that they will support sustainable livelihoods interventions. **Annex B** of this module includes a template for linking these within the framework of Track A and B interventions according to the UN Employment Policy for Post-Conflict Employment Creation, Income-Generation and Reintegration.

See IDDRS Module 3.20 for further information on DDR assessments and programme design.

#### REINTEGRATION PLANNING AND DESIGN: INTEGRATING NRM CONSIDERATIONS

- Collect and analyze data on natural resources, conflict and DDR linkages (including formal and informal, illicit activities) through relevant assessments, including conflict and security analysis.
- Consider environmental impacts (especially water and fuel) when building and rehabilitating disarmament and demobilization sites.
- Take into account the risks and opportunities associated with the use of natural resources to support livelihoods that lead to effective reintegration and avoid the risk of future conflict.
- Address the social dimensions of natural resources in livelihoods and employment, including the gender dimensions of resource access and use.
- Engage and consult all relevant actors in the government, civil society, NGOs, international organizations and local and international private sector entities.
- Include a selection of environmental and natural resource indicators to monitor the DDR trajectory and any potential destabilizing trends.
- Analyze and consider the impact of government proposals and concession negotiations for extractive industries and any risks for security and durable peace.

#### 7.4. Capacities and exit strategies

Increasing individual and organizational capacity to fully incorporate risks and seize opportunities associated with natural resources during DDR planning, design and implementation contributes to better programme outcomes. Capacity building for natural resource management in DDR may be improved through training, secondment of experts and integrated planning with technical experts in natural resources and environmental issues at national, regional and local/community levels as appropriate.

Capacity building for natural resource management should include participation of key DDR stakeholders in national DDR commissions, relevant line ministries and local implementing partners, as well as international NGOs, regional organizations and UN agencies supporting DDR programmes. DDR managers should call upon national

capacity building providers where they exist, as well as relevant international capacity building providers such as UN agencies, international organizations, regional organizations and other entities. Horizontal learning across country programmes should also be promoted since good practices in implementing natural resource management exist in many countries and programmes.

Where training is identified as a capacity building solution and where high numbers of national and international DDR practitioners need to be trained, DDR managers should consider organizing trainings in collaboration with relevant capacity building providers. Capacity building initiatives should also include evaluation plans to ensure good follow up, results and accountability.

Building capacities of national actors and stakeholders is a crucial component of a DDR exit strategy. Enhancing knowledge and skills of DDR practitioners in natural resource management will maximize prospects for making reintegration opportunities in natural resource sectors offered to ex-combatants and those formerly associated with armed forces and groups sustainable.

Further resources on developing capacities include *UN-EU Partnership: Strengthening Capacities for Conflict Sensitive Natural Resource Management* (United Nations Interagency Framework Team for Preventive Action, 2012); Conflict Management over Natural Resources: Capacity Building Program under the Community Based Rural Development Project (FAO, 2006); Managing Natural Resources for Post-Conflict Reintegration & Recovery: Workshop Report (IAWG on DDR, CSRS, UNDP and UNEP; 2012).

#### 7.5. Monitoring and evaluation

Specific natural resource-related monitoring and evaluation (M&E) is necessary to ensure that DDR programmes are addressing the numerous risks posed and opportunities provided by natural resources, and to examine the sustainability of interventions and results. At present, the linkages of natural resources to conflict, peacemaking and peacebuilding have often been minimized, if not wholly unrecognized during DDR and (early) recovery, and natural resource management issues are thus not formally included in the setting of indicators and targets, nor monitored and evaluated by most DDR programmes. In many cases, natural resource management is seen as an issue to be addressed at a later stage in DDR programmes. In others, practical limitations, such as capacity and resource shortages, limit efforts to include natural resources in programme evaluation practices.

However, as this module sets out, natural resource management issues and linkages to DDR can impact the sustainability of the interventions and results. Decisions and actions taken early on can set in place unsustainable trajectories of natural resource management that can undermine reintegration and recovery processes. More specifically, DDR practitioners should work closely with NRM experts and M&E specialists to establish continuous monitoring and evaluation practices and identify a set of indicators that measure the role of natural resources in DDR programmes and their impacts. DDR managers should make use of natural resource-relevant M&E findings to assess progress in DDR processes, mitigate natural resource-related risks and to adjust the DDR programme for greater impact. In addition, M&E will contribute to filling the gaps in linking natural resource management to maximize results of DDR interventions.

**Annex C** provides a non-exhaustive list of key questions and related indicators for DDR practitioners to monitor and evaluate programme performance in the area of natural resource management.

#### 7.6. Specific needs groups

In order to appropriately address the needs of all DDR programme participants and beneficiaries, a thorough analysis of groups with specific needs in natural resource management should be carried out as part of the general DDR assessments and these considerations should then be mainstreamed throughout programme design and implementation. Specific needs groups often include women and girls, youth and persons with disabilities, but other vulnerabilities might also exist in different DDR contexts. Annex D presents a non-exhaustive list of questions that can be incorporated in DDR assessments in regard to the specific needs groups and natural resource management.

#### EXAMPLE OF SPECIFIC NEEDS ASSESSMENTS: GENDER ANALYSIS30

Gender refers to the socially constructed attributes and opportunities associated with being male or female and the relationships between and among women, men, girls and boys, in a certain sociocultural context. Gender-responsive DDR programmes are planned, implemented, monitored and evaluated in a manner to meet the different needs of female and male ex-combatants, supporters and dependants. Due to the context-bound nature of the term, understanding and addressing gender issues always requires a careful analysis, looking into the responsibilities, activities, interests and priorities of women and men, and how their experiences of problems may differ.

The following starting points facilitate a gender-sensitive analysis:

- Disaggregate all data by sex and age
  - Go beyond aggregate terms, such as 'families', 'farmers' or 'ex-combatants' and allow gender differences and inequalities to be identified. Studies have shown, for example, that 'people' respond to economic changes in gender-specific ways because gender has a major influence on their access to resources, responsibilities and alternatives.
- Seek the inputs of both women and men in all consultations

Women's and men's priorities often tend to differ remarkably in a post-conflict situation, with women emphasizing immediate needs, such as safe drinking water, while men concentrate more on economic recovery. The needs of all parties should be mapped and addressed in programming. As women's access to decision making is restricted in many contexts, special strategies are often needed in order to ensure that women's voices are equally heard.

- Avoid assuming that all women and men share the same needs
  - Women and men are not homogenous groups and differences related to class, ethnicity, religion, disability or age, among other things, influence people's specific needs and perspectives. Genderrelated information should not be used to strengthen existing gender biases, but to become aware of existing strengths and vulnerabilities in order to create more targeted support measures. Gender should also not be restricted to considering only women and girls: men and boys have gender-specific needs as well.
- Identify means to support equitable distribution of benefits and opportunities Given gender-related and other disparities in societies, programmes cannot be assumed to automatically address the needs of all participants. Special attention is required to ensure adequate support and equitable access to benefits for all.

#### Women and girls

Women and girls often directly manage communal natural resources for their livelihoods and provide for the food security of their families (e.g. through direct cultivation of the land, collection of water, fodder, herbs, firewood, etc.). However, they often lack tenure or official rights to the natural resources they rely on. To assist the reintegration of women through NRM, DDR practitioners should pay special attention to ensuring that women are able to access natural resources especially in situations where this is restricted due to lack of support from a male relative. In rural areas, this is especially crucial for access to land, which can provide the basis for women's livelihoods and which often determines their ability to access credit and take out loans. For example, where DDR programmes link to land titling, they should encourage shared titling between male and female heads of households.

In addition, DDR practitioners should particularly ensure that employment opportunities and necessary skills training are available for women in natural resource sectors, including non-traditional women's jobs. Moreover, DDR practitioners must ensure that women are part of any decision making processes related to natural resources and that their voices are heard in planning and prioritization of policy or programmatic decisions from the beginning.

For more guidance, see IDDRS module 5.10 on Women, Gender and DDR and *Women and Natural Resources: Unlocking the Peacebuilding Potential* (UNEP, UNDP, UN Women and PBSO, 2013).

#### Youth

Youth are one of the most important target groups for reintegration, since they may easily be at risk for re-recruitment and often have lost years of education and skills-building due to conflict. Most post-conflict countries also have substantial numbers of youth relative to the rest of the population. It is therefore important to ensure that youth have access to opportunities for re-building their livelihoods. For reintegration activities for youth, DDR programmes may include education and awareness-raising on best practices for enhancing livelihoods through natural resources, as well as methods to protect natural resources for development and use by future generations.

Youth can also be targeted as leaders through training-of-trainers programmes to further disseminate best practices and skills for improving the use of natural resources in reintegration programmes. When targeting youth, efforts should be made to ensure that both male and female youth are engaged in activities. While male youth are often the more visible group in post-conflict settings, there are proven peace dividends in providing support to female youth through increased nutrition rates of their dependents and community at large, as well as increased educational enrollment rates.

In following a value chain approach with agricultural products, non-timber forest products or fisheries, DDR practitioners should seek to identify processing stages that can be completed by youth with little work experience or skills. Habitat and ecosystem services restoration can also offer opportunities for young people.

See IDDRS module 5.20 on Youth and DDR for more guidance.

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#### Persons with disabilities

Participants with disabilities should have access and be supported to participate productively in reintegration opportunities in natural resource sectors. This requires clear identification of specific needs to be addressed and barriers that might prevent their participation in reintegration opportunities in the different natural resource sectors. Interventions should be undertaken in collaboration with national authorities and organizations within the framework of community-based rehabilitation and as part of comprehensive public health approaches. DDR programmes should seek expert advice from, and engage in discussions with, relevant NGOs and government line ministries working to promote the rights of persons with disabilities, as outlined in the United Nations Convention on the Rights of Persons with Disabilities (2006) and Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993).

### 8. Disarmament and demobilization

Disarmament and demobilization may be carried out before, during or after reintegration processes have begun. For further guidance on disarmament and demobilization, please see IDDRS Modules 4.10 on Disarmament and 4.20 on Demobilization.

#### 8.1. Arms collection and removal

In order to ensure that security objectives are achieved, DDR practitioners should examine the role of natural resources in the acquisition of weapons, and collaborate with relevant stakeholders to prevent and address identified concerns. DDR practitioners should collaborate with relevant international bodies in contexts where there are sanctions for particular natural resources in order to ensure that natural resources are no longer used to finance the acquisition of arms for armed groups undergoing disarmament and demobilization or by individual combatants being disarmed and demobilized. Disarmament activities in settings where natural resources played a significant role should be planned and implemented in accordance with international law and norms on the protection of the environment during the destruction of weapons.

In addition to working with sanctions programmes, DDR practitioners should collaborate with other ongoing interventions that aim to increase transparency and accountability in natural resource sectors, particularly those that have been used to fuel the conflict. These may include due diligence guidelines, supply chain transparency initiatives, creation of civil society oversight bodies and accountability for revenues in natural resource sectors by private entities and/or government agencies.

(ICON) For more information on international law and norms on the protection of the environment during the destruction of weapons see Resolution adopted by the General Assembly on *Observance of environmental norms in the drafting and implementation of agreements on disarmament and arms control* of 13 January 2011 (A/RES/65/53).

#### 8.2. Considerations for disarmament and demobilization sites

Disarmament and demobilization sites can cause negative impacts for natural resources, including through demands for water, energy, building materials and increased pressure on local wildlife populations.



The following box offers further detailed guidance that should be followed, where applicable.

(ICON) See IDDRS Modules 4.10 and 4.20 for further guidance on planning, running and closing disarmament and demobilization sites. For further guidance on environmentally responsible camp management see: *Environmental Guidelines* (UNHCR, 2005).

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#### GUIDANCE: ENVIRONMENTAL CONSIDERATIONS FOR DISARMAMENT AND DEMOBILIZATION SITES

- The environmental aspects of site selection should be incorporated into DDR operational planning activities.
- Disarmament and demobilization site planners should develop a framework outlining the respective responsibilities of site managers, the government and other stakeholders during site selection, management, phase-out and closure. Such a framework can be embedded in the site selection plan.
- DDR managers should ensure that a stable funding mechanism is created that supports environmental activities in disarmament and demobilization sites, including rehabilitation during site closure, where feasible.
- Rehabilitation does not necessarily mean to restore a site to its former condition. All efforts should, however, be made to ensure that all major environmental concerns are addressed and that the former camp area is cleaned up and that hazards have been removed.
- DDR managers should engage specialist agencies to guide the environmental rehabilitation process, involving the local community or communities from the outset.
- Environmental rehabilitation and other restoration work done in a site, including infrastructure repair, should conform with and support the national development plan for that region.

#### 8.3. Reinsertion

Demobilization is often accompanied by a reinsertion phase that provides emergency employment and basic livelihoods support for DDR programme participants while waiting for reintegration to begin. In contexts where there has been degradation of natural resources that are important for livelihoods or destruction of key water, sanitation and energy infrastructure, programme participants can be employed in labor-intensive, quick-impact projects under Track A of the UN Employment Policy (see 8.3.1 below). Concerted efforts should be made to equally include women, youth and other groups with specific needs in planning and implementing reinsertion activities. When planned seamlessly, these activities will create the infrastructure systems necessary to support sustainable reintegration programmes and can also create natural resource-related peace dividends amongst community members with due consideration to the priorities and grievances of different natural resource user groups, such as women and men of different ages.

8.3.1. Infrastructure projects (water, sanitation, transportation and agricultural infrastructure) In order to support sustainable reintegration in rural and urban areas, basic means of accessing natural resources necessary to support sustainable livelihoods must be established. During reinsertion, DDR programme participants and community members can work to restore these building blocks for livelihoods, including roads, drainage canals, groundwater

wells, irrigation canals and sanitation infrastructure, as well as to secure water resources. This is especially important in rural areas where many people are employed in agriculture for their livelihoods. In urban areas, priorities should be given for sanitation, access to water and health-related activities that will ensure that high-density areas are safe to live in.

DDR practitioners should prioritize investment in infrastructure projects that strengthen environmental resilience against future crises (e.g. rehabilitation of irrigation channels or restoring agricultural areas that will benefit both ex-combatants and members of the community), thereby encouraging social cohesion and contributing to peacebuilding. The objective of addressing natural resources in reinsertion is to improve the sustainability of the reintegration interventions that will follow, strengthen environmental resilience and lay the groundwork for sound natural resource management.

For further guidance, please refer to the *UNDP Guidance Notes on Community Infrastructure, Debris Management and Emergency Employment and Enterprise Recovery.* 

#### 8.3.2. Ecosystem restoration

In areas where natural resources have been degraded as a result of the conflict, or where degraded landscapes are increasing the risk of natural disasters, ecosystem restoration activities may provide short-term employment opportunities for former combatants, youth at risk of recruitment by armed forces and groups, and community members. Such activities will help to secure the natural resources needed for safe and productive livelihoods. This may include: reforestation, reclamation of mining sites, restoration of wetlands and riverbanks, rehabilitation of mangroves and coastal areas and clean-up of areas contaminated by chemicals, hydrocarbons or other pollutants.

For more information, see the UNEP Policy Brief on Assessing and Restoring Natural Resources in Post-conflict Peacebuilding.

#### 8.3.3. Demining agricultural areas

Landmines and explosive remnants of war take a heavy toll on people's livelihoods, countries' economic and social development, and peacebuilding efforts. Restoring agricultural lands to a productive state is paramount for support livelihoods and improving food security, two of the most important concerns in any post-conflict setting. Demining fields and potential areas for livestock and agriculture will therefore provide an essential step to restoring safety and access to agricultural lands and to restoring the confidence of local populations in the peace process. To ensure that agricultural land is returned to safety and productivity as quickly as possible, where applicable, DDR programmes should seek the expertise of demining groups and programmes such as the United Nations Mine Action Service (UNMAS) and the UN Inter-Agency Coordination Group on Mine Action.

See IDDRS Modules 4.20 on demobilization for further guidance on reinsertion activities.

#### 8.3.4. Waste and debris management

Conflicts often result in a large amount of debris. Short-terms emergency employment measures can be used to clean up this debris and to provide income for community

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members. Such activities lend themselves well to reinsertion activities in the demobilization phase, where ex-combatants and associated groups are in need of productive activities to generate income. Attention should be paid to health and safety regulations in such activities, since hazardous materials can be located within building materials and other debris. In particular, women and youth can take part in such activities by engaging them in the training, employment and planning aspects of waste and debris management.

See UNDP Guidance Note on Debris Management, 2012.

Sample template for linking reinsertion and reintegration activities through Track A and Track B (UN Employment Policy):

TRACK A ACTIVITIES (REINSERTION)	LINK TO TRACK B ACTIVITIES (REINTEGRATION)	WIDER NATURAL RESOURCE MANAGEMENT AND RECOVERY BENEFITS
Rehabilitation and construction of roads (and de-mining of transportation routes) and construction of irrigation infrastructure	Supports development of employment opportunities in the agricultural sector and access to markets, information, goods and services; improves efficiency of water usage for improved agricultural livelihoods and supports food security initiatives	De-mining protects wildlife and saves lives; improved food security may reduce pressure on wildlife and surrounding protected areas, if relevant
Rehabilitation of ecosystems (forests, watersheds, river banks, mangroves, etc.)	Tree farms and wood lots can be established to generate income for fuel wood and construction materials; improved mangroves can support healthy fisheries	Improved stability for river banks will allow for less soil erosion and sedimentation of the river (ie. clearer, cleaner water); more productive ecosystem services <sup>31</sup>
Rehabilitation and improvement of sanitation infrastructure (waste removal, improved water sources, drainage, water treatment)	Provides opportunities for waste- based and recyclable products for use and sale; supports improved health conditions and small enterprises reliant on water resources	Reduces uncontrolled release of biological and other wastes into the environment and water sources; improves public health; frees time of women and girls, typically responsible for household water resources, time for other activities
Rehabilitation and establishment of energy services, including renewable energy and household energy	Allows for additional enterprises and services, including social and educational facilities; opens possibility employing appropriate technologies encourages local means of production and maintenance	Reduces pressure on biomass for fuel (wood, charcoal, fodder, etc.) and pressure on forest resources to meet basic fuel needs; allows for establishment of health and education centers for youth and other at-risk groups, reduces health and security risks related to the collection of traditional energy sources, such as charcoal
Rehabilitation and construction of agricultural extension services and centers	Allows for functional agricultural extension services to support revitalization and improvement for agricultural sector, as well as educational facilities, trade centers and food storage and distribution centers	Improves income generating opportunities in agriculture, improves food security, provides opportunity for government services to reach rural areas
(Re-)establishment of authority and rehabilitation of protected areas	Along with security sector reform, allows for employment opportunities for ex-combatants as protected area staff and park rangers; creates future opportunities for eco-tourism	Facilitates the creation and management of protected areas for conservation of critical habitats and wildlife; improves security within parks

#### 8.4. Reintegration: guiding policies and approaches for addressing natural resources

The following policies, approaches and interventions should be considered and used by DDR practitioners to develop, expand or enhance existing social and economic opportunities in natural resource sectors.

## 8.4.1. United Nations Policy for Post-Conflict Employment Creation, Income Generation and Reintegration

The United Nations Policy for Employment Creation, Income Generation and Reintegration<sup>32</sup> outlines a three-track approach to supporting economic livelihoods in post-conflict settings. This approach aligns with the need for improved management of natural resources in post-conflict contexts. Track A activities can include the quick-impact and labour-intensive projects that are outlined for reinsertion in this module, including the rehabilitation of degraded ecosystems. Track B activities include longer-term job creation in natural resource sectors through local economic recovery (LER) and/or community-driven recovery and capacity development, such as reintegration interventions which invest in local socio-economic infrastructure and develop employment opportunities in natural resource sectors. Track C deals with policy approaches that should also include natural resources, although in many cases this will be outside the scope of DDR programmes and require linkages with broader economic recovery initiatives. Please see Figure 1 for a graphic of the three-track approach.

#### 8.4.2. Employment opportunities

Many resource-rich developing countries find themselves particularly vulnerable to the "resource curse". Risk assessments have shown that the lack of economic diversification is often a key factor affecting these countries' capacity for economic growth and vulnerability to conflict. Wherever possible, DDR practitioners should take this dynamic into account when promoting livelihoods opportunities and seek to ensure that they are diverse and based upon market demand for goods and services. Further guidance is available from the *United Nations Development Group's Guidance Note on Natural Resource Management in Transition Settings* (see section 5).

National governments and counterparts, including donors, the UN and the international community, can encourage reforms in diverse NRM sectors in order to promote private sector development, help to attract foreign investment and revitalize participation in national, regional and international markets. In so doing, the natural resource sectors that were most implicated in the conflict can be transformed to support broader goals of governance, rule of law, economic recovery and employment creation.

The following table presents entry points for addressing some of the key natural resources in DDR programming.

For more in-depth guidance on ways of incorporating different natural resource sectors in DDR programmes, refer to *The Role of Natural Resources in Disarmament, Demobilization and Reintegration (DDR) Programmes: Addressing Risks and Seizing Opportunities* (UNEP and UNDP, 2013).

#### ENTRY POINTS FOR ECONOMIC REINTEGRATION IN NRM SECTORS

#### Land

#### Considerations and risks

- Conflict over land rights and tenure is common and can have deep roots in many cultures and may be violent;
- Access to land is often part of the grievances behind conflict and members of armed forces and groups may have taken part in land grabbing or displacement during the conflict, leading to heightened sensitivities in the postconflict phase;
- Determining existing land rights might be complicated in contexts where pluralistic legal systems co-exist;
- Lack of access to land and land disputes can be key constraints to reintegration especially in areas where dependency on agricultural livelihoods is high;
- Certain groups, such as women and youth, are often systematically excluded from land rights and tenure.

#### Opportunities

- Cooperation over land tenure can provide a platform for dialogue between groups and support community-based reintegration;
- Post-conflict land distribution can provide opportunities to allow women and youth access to land;
- Implementing good land management practices can increase productivity of land and improve livelihoods.

#### Further guidance

- Land and Post-conflict Peacebuilding (UNEP-ELI, 2013).
- EU-UN Partnership on Land and Natural Resources Land Policy Brief (EU-UN, 2012).
- Land conflicts: A practical guide to dealing with land disputes (GTZ, 2008).
- Handbook on Post-Conflict Land Administration and Peacebuilding - Volume 1: Countries with Land Records (UN Rule of Law, 2007).
- Land & Conflict. A Toolkit for Intervention (USAID, 2005).

#### Agriculture

#### Considerations and risks

- Agriculture is the most commonly chosen reintegration option in most DDR programmes;
- Challenges to agricultural livelihoods in post-conflict settings relate to ensuring food security and moving from subsistence to diversified farming;
- Access to land ownership, tenure and extension services can be restricted to many groups;
- Access to water can be limited, reducing yields;
- Access to markets (safe and reliable transportation infrastructure) are often lacking;
- Access to dispute resolution mechanisms can be limited or exclude certain groups, such as women;
- Access to agricultural inputs (information and materials to improve productivity of soils and harvests) can be limited and access to credit might depend on land ownership or family ties, restricting the ability of female-headed households, single women or youth from enhancing productivity;
- Land mines restrict access to arable land;

#### Opportunities

- Increasing access to extension services are crucial in agricultural reintegration opportunities;
- Access to communication and market information (e.g. through SMS on mobile phones) support planning and choosing of crops:
- Developing value chains of agricultural products through improved processing, packaging, international or regional certification, sales, logistics and marketing can increase incomes;
- Engaging women and youth in value chain development through skills development and access to other capital assets provide opportunities for vulnerable groups;
- Awareness raising and providing viable alternatives to illicit drug cultivation should be done in accordance with locally determined rural development plans;
- Consultations with agricultural experts support adoption of best practices for particular area and conditions (e.g. soil, rainfall, temperature);

#### ENTRY POINTS FOR ECONOMIC REINTEGRATION IN NRM SECTORS

#### Agriculture (continued)

#### Considerations and risks

- In conflict settings, agricultural land is often used for illicit drug cultivation;
- Climate change-related droughts and changes in rain patterns can spoil crops.

#### **Opportunities**

Joint interventions with government and other UN agencies (e.g. through trainings) increase engagement and interaction between communities and DDR participants, while also supporting practices that result in higher yields and sustainability of livelihoods through soil conservation and erosion control.

#### Further guidance

- Post-conflict land tenure Using a sustainable livelihoods approach (FAO, 2004).
- Rural Recovery in Fragile States: Agricultural Support in Countries Emerging from Conflict (ODI, 2007).
- A Guide to Economic Growth in Post-conflict Countries (USAID, 2009).
- Livelihoods and Economic Recovery in Crisis Situations (UNDP, 2013).

#### **Fisheries**

#### Considerations and risks

- Overfishing can deplete the stock to the point where many livelihoods can be lost;
- Conflicts may arise between communities over access to fisheries resources;
- Development of aquaculture resources can lead to mangrove deforestation and heightened risk for natural disasters;
- Improper management of aquaculture can lead to pollution and contamination of land and water resources.

#### Opportunities

- Well-managed fisheries that include cooperatives and co-management schemes can engage multiple communities;
- Value chain development can serve to add value to catch before going to market to support livelihoods development, especially for women and youth;
- Mangrove restoration can improve spawning grounds for fisheries and improve industry;
- Aquaculture provides livelihoods opportunities also for women and youth.

#### Further guidance

- <u>Natural Resource Management in Transition</u>
   <u>Settings (UNDG-ECHA, 2013).</u>
- Conflict-sensitive approaches to value-chain development (USAID, 2008).

#### Forestry

#### Considerations and risks

- Forest products is an immediate sector for export and therefore can easily be exploited to finance armed forces and groups, whether for commercial timber, charcoal or non-timber forest products;
- Forests are at risk for overharvesting and degradation due to market pressures (for brick making, charcoal, or shelter reconstruction), which can undermine sustainable livelihoods;

#### **Opportunities**

- Forests provide multiple resources from subsistence to commercial timber and nontimber products;
- The sector also entails opportunities in ecotourism and reforestation activities such as woodlots and plantations;
- Agroforestry systems can be developed to support and complement agriculture;

# ENTRY POINTS FOR ECONOMIC REINTEGRATION IN NRM SECTORS

#### Forestry (continued)

#### Considerations and risks

- Potential for community-community or community-government conflict exists if forest concessions are granted without consultation of local users and they undermine local livelihoods;
- Over-exploitation of forest resources can result in loss of wildlife resources and increase vulnerability to natural disasters (e.g. landslides and floods).

#### Opportunities

- Forestry creates opportunities to support community ownership and maintenance of local natural resources;
- Working with government stakeholders and line ministries in developing zoning and forest management plans creates opportunities for diversification of forest-related livelihood opportunities, while preventing deforestation and preventing harmful practices (e.g. charcoal use causing in-door pollution).

# Further guidance

- EU-UN Partnership on Land and Natural Resources in Conflict: Renewable resources and conflict (UN, 2012).
- Community-based forest resource conflict management: Training Package Vol.1 (FAO, 2002).
- Forest Related Conflict: Impacts, Links and Measures to Mitigate (Rights and Resources Initiative, 2008).
- Forests and Violent Conflict (OECD, 2005).

# Energy

#### Considerations and risks

- Avoid support for charcoal trade, as pressure on local forests for household energy demands (charcoal production) can degrade forest resources;
- Women and girls often spend a significant time of their day on securing fuel wood, which can expose them to security risks, as well as further limit the time they have to spend for other activities;
- Reliance on biomass (e.g. wood and dung) is the leading cause of indoor pollution, causing severe health risks;
- Potential for grievances or attacks on liquid natural gas or oil infrastructure facilities are imminent if wealth sharing is not adequately handled.

## Opportunities

- Creating woodlots and plantations to supply local household fuel demand free especially women and girls' time for income-generating activities or education:
- Alternative energy creation schemes (e.g. production of briquettes or construction of low-fuel cooking stoves) create direct livelihood opportunities, while also enabling conditions for micro-enterprise development and other income-generating activities;
- Micro-hydro or solar technologies may be appropriate or available depending on the context;
- Replacement of charcoal by liquefied petroleum gas can create new business opportunities.

#### Further guidance

- Global Alliance for Clean Cookstoves.
- Charcoal Production from Alternative Feed Stocks.

# ENTRY POINTS FOR ECONOMIC REINTEGRATION IN NRM SECTORS

#### Mining

#### Considerations and risks

- Direct impacts from mining can pose risks to livelihoods, including land degradation, freshwater depletion, soil contamination and hazardous wastes contamination;
- Social risks related to mining include population growth in mining areas, increased levels of violence against women and high levels of HIV/AIDS, as well as problems regarding land tenure and management for miners and communities living around mines;
- Most jobs in industrial mining are highly skilled, limiting the potential of the industry for reintegration opportunities;
- Service economies around mining sites create job opportunities, but protection and means of preventing labor-exploitation should be ensured if these are promoted as reintegration opportunities;
- Lack of transparency in granting mine concessions may cause resentment and conflict between community and mining company or community and government;
- Lack of regulation for artisanal miners may cause labor-exploitation, use of child labor, contamination of environment and related occupational and health risks;
- Potential capture of mines and profits by former members of armed groups can reignite hostilities.

#### **Opportunities**

- Mining can create employment for local communities;
- Infrastructure and services development in communities surrounding the mines create job and business opportunities especially for women;
- DDR programme can support mining trading centers to allow market access and information to artisanal miners:
- Working together with government counterparts and local authorities to develop labor protection measures and regulations, as well as to promote due diligence requirements and transparency and accountability in mineral supply chains help to consolidate sound NRM governance and ensure protection for DDR participants and local people engaged in the mining sector;
- Relations between communities and government can improve through transparent concession processes and equitable distribution of economic benefits.

#### Further guidance

- Extractives Industries Transparency Initiative.
- Kimberley Process Certification Scheme.
- OECD Due Diligence Guidelines.
- Artisanal Mining and Post-Conflict Reconstruction in the Democratic Republic of the Congo (SIPRI, 2009).
- Minerals and Conflict: a toolkit for intervention (USAID, 2004).

#### Water management

## Considerations and risks

- Access to water is a potential source of conflict where more than one user claims access or rights and is unwilling to compromise;
- Access to safe water is one of the most pressing needs in post-conflict settings;
- Poor water management can increase risk of disease in urban or camp settings with high population density;

#### **Opportunities**

- Activities in water management can improve overall health and agricultural yields;
- Water catchment systems are inexpensive, easy to implement and support agriculture;
- If well managed, water management provides potential for cooperation and establishing social cohesion between different water user groups.

# ENTRY POINTS FOR ECONOMIC REINTEGRATION IN NRM SECTORS

#### Water management (continued)

#### Considerations and risks

 Many livelihoods directly linked with immediate food security (e.g. agriculture and animal husbandry) rely on sufficient water supply.

# Further guidance

- Land and Post-conflict Peacebuilding Policy Brief (UNEP-ELI, 2013).
- Integrated Water Resources Management for River Basin Organizations (Cap-Net, UNDP, 2008).
- Conflict Resolution and Negotiation Skills for Integrated Water Resource Management (Cap-Net, UNDP, 2008).
- Water Resource Scarcity and Conflict: Review of applicable Indicators and Systems of Reference (Tamas, UNESCO PCCP, 2003).

# Waste management

#### Considerations and risks

- Employment in waste management should be based on sound market analysis to ensure that sufficient demand exists;
- Inappropriate waste disposal and/or recycling can threaten health of workers and communities and contaminate soil and water resources;
- Climate change-related drought can reduce availability of water resources.

## Opportunities

- Recycling plastics and other materials creates opportunities for developing small businesses;
- Re-use and reconstruction of materials can provide income-generating opportunities;
- Engaging with private sector helps DDR programmes to ensure that promoted reintegration opportunities in waste management meet market needs (e.g. waste for energy, building materials or sale to recycling);
- Livelihood in waste management support community reintegration through keeping the environment clean and free of waste;
- Multiple development organizations and NGOs have experience of creative ways of using waste material as a source of business opportunities.

# Further guidance

- Assessing and Restoring Natural Resources in Post-conflict Peacebuilding (UNEP-ELI, 2013).
- UNEP Post-conflict and Disaster Management Branch.: Post-crisis environmental recovery resources.
- Post-conflict Reconstruction (CSIS, 2002).
- UNDP Guidance Note on Debris Management (UNDP, 2013).

#### 8.4.3. Engaging the private sector

Both local and international private sector engagement are a key component of economic revitalization in post-conflict settings. While it can be difficult to get accurate information on the activities of private companies and their agreements with governments before, during and after conflict, the post-conflict period offers an opportunity to engage with the private sector to enhance existing employment opportunities and to encourage its support for much-needed development. DDR practitioners should determine the impacts and dependencies of the private sector on natural resources as part of their assessments and analyses. This can help to identify existing and upcoming private sector companies that could be engaged to supply training and employment for DDR programme participants and beneficiaries.

In natural resource sectors, private companies can also provide much-needed expertise and support for infrastructure development. To help ensure that they encourage employment for DDR programme participants in ethical and secure environments, DDR practitioners can engage with transparency and due-diligence initiatives such as the Extractive Industries Transparency Initiative process and the *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* of the Organization for Economic Cooperation and Development (OECD).<sup>33</sup> While these initiatives do not implicate DDR programmes directly, increased transparency measures in supply chains can affect local labor markets and may offer opportunities for training programmes. Since the private sector will undoubtedly be an important source of employment opportunities, DDR practitioners should do their best to engage with them and identify mutually beneficial opportunities for reintegration programmes.

#### 8.4.4. Value chain approach

Value chains are defined as "the full range of interrelated productive activities performed by firms in different geographical locations to bring out a product or a service from conception to complete production and delivery to final consumers". A value chain encompasses more than the production process and also includes the networks and flow of information and incentives between the people involved at various stages. It is important to note that value chains may involve several products, including waste and by-products. <sup>35</sup>

Each step in a value chain process allows for employment and income-generating opportunities. Value chain approaches are especially useful for natural resource sectors such as forestry, non-timber forest products (such as seeds, bark, resins, fruits, medicinal plants, etc.), fisheries and agriculture. In natural resource management, the value chain approach can aid in strengthening the market opportunities, improving clean technology to support production methods, accessing new and growing markets and bringing employment and income-generation activities that are based on natural resources. DDR practitioners may use value chain approaches to enhance reintegration opportunities and to link opportunities across various sectors (see IDDRS Module 4.30 on Reintegration for further guidance on the value chain approach).

#### WHAT IS BIOTRADE?37

BioTrade is defined as the collection, production, transformation and commercialization of goods and services derived from native biodiversity, in a way that is environmentally, socially and economically sustainable.<sup>38</sup>

The basic principles for the development of BioTrade activities are:

- Principle 1: Conservation of biodiversity
- Principle 2: Sustainable use of biodiversity
- Principle 3: Fair and equitable sharing of the benefits derived from the use of biodiversity
- Principle 4: Socio-economic sustainability (productive, financial and market management)
- Principle 5: Compliance with national and international regulations
- Principle 6: Respect for the rights of the actors involved in BioTrade activities
- Principle 7: Clarity about land tenure, use and access to natural resources and knowledge

For further information see UNCTAD's Guidelines for a Methodology to Support Value Chains for BioTrade Products: From the Selection of Products to the Development of Sector Strategies (2009). Available from: www.biotrade.org.

A range of resources are available to support value chain development, including ILO's *Value Chain development (VCD) and Business Development Services (BDS) Resource Guide* (2010) and UNCTAD's *Guidelines for a Methodology to Support Value Chains for BioTrade Products: From the Selection of Products to the Development of Sector Strategies* (2009), which provide guidance on developing value chains for products that are environmentally and socially responsible and ensure the conservation of biodiversity.

## 8.4.5. Community-based natural resource management

Engaging in different natural resource sectors can be extremely contentious in post-conflict settings. To reduce any grievances or existing tensions over shared resources, careful assessments and community consultations shall be undertaken before including ex-combatants in economic reintegration opportunities in natural resource sectors. As laid out in the UN Employment Policy, community participation in these issues can help mitigate potential causes of conflict, including access to water, land or other natural resources. Capacity-building within the government will also need to take place to ensure fair and equitable benefit-sharing during local economic recovery (LER).

In order for the reintegration process to continue successfully beyond the end of the actual reintegration programme, communities of return need to be adequately supported in natural resource management interventions and capable of addressing any related challenges. It is therefore essential that all natural resource-based reintegration interventions be conducted with input from communities and local civil society as well as the government and national DDR commission and other DDR authorities. Moving a step further, community-based natural resource management (CBNRM) programmes, which seek to support local ownership over natural resource management decisions and to increase related economic opportunities, provide communities with a strong incentive to sustainably manage their natural resources

themselves, typically with the aid of technical assistance. Through an inclusive approach to CBNRM, they also contribute to social cohesion, reconciliation and peacebuilding. Where applied, such reintegration programmes should seek to incorporate local knowledge related to natural resource management in reintegration programme planning.

Due to their different roles and patterns of gendered division of labour, female and male community members have different natural resource-related knowledge skills, and needs that should be considered when planning and implementing CBNRM activities. Education and access to information is an essential component of community empowerment and CBNRM programmes. In terms of natural resources, this means ensuring that communities and specific needs groups are fully informed of the risks and opportunities related to the natural resources and environment in the areas where they live. Providing communities with the tools and resources to manage natural resources to ensure recovery and reintegration can empower them to take ownership of the programmes and to seek further engagement and accountability from the government and private sector regarding natural resource management and governance.

#### 8.4.6. Education and training

Increasing environmental awareness through education and training about good natural resource management can serve as a tool for social reintegration when it brings people from opposing groups together to learn about better ways to manage shared natural resources. The implementation of such activities can support dialogue and provide a platform for peacebuilding, as well as increasing technical capacities for improved livelihoods. Approaches and best practices in this area include:

- Targeting youth as leaders for environmental awareness and as community trainers;
- Creating inclusive community groups with representation of women and men of different age groups to discuss and decide on the management of communal natural resources;
- Implementing training and educational sessions on best practices in natural resource management that bring together diverse stakeholders, including ex-combatants, associated groups and conflict-affected community members.

# 9. DDR, Security Sector Reform (SSR) and natural resources

The IDDRS Module 6.10 on DDR and SSR explicitly mentions the need to consider natural resource implications for security and for the DDR-SSR nexus. In particular, this should be considered where armed groups have been controlling natural resource extraction and/or trade areas or networks and where this dynamic is likely to continue after the members of armed groups are integrated into the security sector. In the context of ongoing security sector reform, care must be taken not to further militarize natural resource extraction areas. Specific attention should be paid to the risks that this dynamic could pose for security and for successful DDR (also see IDDRS Module 6.10 on DDR and Security Sector Reform).

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# 10. Natural resource governance, reconciliation and sustainable development

People and cultures are closely tied to the environment in which they live and to the natural resources upon which they depend. In addition to their economic benefits, natural resources and ecosystem services can support successful social reintegration and reconciliation. In this sense, natural resource management is a tool for engaging community members to work together, to revive and strengthen traditional natural resource management techniques that may have been lost during the conflict, and to encourage cooperation towards a shared goal, between and amongst communities and between communities and the State. In settings where natural resources have played a significant role in the conflict, DDR practitioners should explore opportunities for addressing underlying grievances over such resources by promoting equitable and fair access to natural resources during reintegration, including for women, youth and participants with disability.

Access to natural resources, especially land, often carries significant importance for ex-combatants during reintegration, particularly for female ex-combatants and women associated with armed forces and groups. Whether the communities are their original places of origin or are new to them, ensuring that they have access to land will be important in establishing their social status and in ensuring that they have access to basic resources for livelihoods. In rural areas, it is essential that DDR practitioners recognize the connection between land and social identity, especially for young men, who often have few alternative options for establishing their place in society, and for women, who are often responsible for food security and extremely vulnerable to exclusion from land or lack of access.

In areas where land grabbing has occurred, DDR managers and staff should not only ensure that they do not aggravate any existing tensions through reintegration activities, but also seek to help programme participants and community members to find commonly agreeable and peaceful solutions to disputes. This includes collaborating with relevant authorities and mechanisms since land distribution not only affects ex-combatants through DDR, but should be addressed rather within larger processes of land restitution and reform for displaced and returning populations, as articulated in the Pinheiro Principles (see section 5.8).

Environmental issues and protection of natural resources can serve as effective platforms or catalysts for enhancing dialogue, building confidence, exploiting shared interests and broadening cooperation and reconciliation between ex-combatants and their communities, between and amongst communities and between communities and the State. A recent report by UNEP in Sudan highlights these issues.<sup>39</sup> On the community level, DDR programmes can work to mitigate tensions and foster reconciliation efforts over natural resources in the following ways:

At the outset of the DDR process and during the assessment and analysis phases, identify locations or potential "hotspots" where natural resources may create tensions between groups, as well as opportunities for environmental cooperation to complement and reinforce reconciliation and peacebuilding efforts;

- Make dialogue and confidence-building between DDR participants and communities an integral part of environmental projects during reintegration;
- Build reintegration options on existing community-based systems and traditions of natural resource management as potential sources for post-conflict peacebuilding, while working to ensure that they are broadly inclusive of different social groups, including women, youth and persons with disabilities.

Governance institutions and expressions of authority, accountability and transparency are frequently eroded by conflict. When tensions intensify and the rule of law breaks down, the resulting institutional vacuum can lead to a culture of impunity and corruption as public officials begin to ignore governance norms and structures, focusing instead on their personal interests. This collapse of governance structures contributes directly to widespread institutional failures in all sectors, allowing opportunistic entrepreneurs to establish uncontrolled systems of resource exploitation. Conflict also tends to confuse property rights, undercut positive NRM practices, and compromise dispute resolution mechanisms. At the same time, public finances are often diverted for military purposes, resulting in the decay of, or lack of investment in, water, waste management and energy services, with corresponding health and environmental contamination risks.<sup>40</sup>

Into the peacebuilding period, the success of a DDR programme and the long-term sustainability of natural resource-based reintegration interventions will largely depend on whether there is a good, functioning governance structure at the local, regional and national level. The effective governance of natural resources and the environment should be viewed as an investment in conflict prevention within peacebuilding and development processes. This was clearly recognized in 2007 by the former Assistant Secretary-General for Peacebuilding Support, Carolyn McAskie, when she stated that "where resource exploitation has driven war, or served to impede peace, improving governance capacity to control natural resources is a critical element of peacebuilding."41

DDR managers and programme officials will not be able to influence, control or focus upon all aspects of natural resource management and governance that link to their programmes. However, through careful and equitable planning, design and implementation of natural resource-based activities, DDR programmes can play a multifaceted and pivotal role in paving the way for sound environmental governance and sustainable development. Moreover, they can ensure that access to grievance and non-violent dispute resolution mechanisms are available for participants, beneficiaries and others implicated in the reintegration process, in order to mitigate the risks that natural resources pose for conflict relapse. Through incorporating sound NRM into programming, they can also expand and improve the livelihoods available through NRM and thus improve the sustainability of reintegration overall.

# Annex A: Terms and definitions

**BioTrade:** The collection, production, transformation and commercialization of goods and services derived from native biodiversity, in a way that is environmentally, socially and economically sustainable.<sup>42</sup>

**Conflict resources:** As defined by Global Witness, conflict resources are natural resources whose systematic exploitation and trade in a context of conflict contribute to, benefit from, or result in the commission of serious violations of human rights, violations of international humanitarian law or violations amounting to crimes under international law.<sup>43</sup>

Ecosystem services and benefits: The resources and conditions provided by ecosystem processes (such as nutrient and hydrological cycles) and the species they contain that contribute to healthy natural ecosystems that sustain and fulfill human life. Ecosystem services provide the growth and regeneration of natural resources upon which livelihoods and economic systems are based, as well as environmental health benefits. These include 'provisioning services' such as food, water, timber and fibre; 'regulating services' that affect climate, floods, disease, wastes, and water quality; 'cultural services' that provide recreational, aesthetic, and spiritual benefits; and 'supporting services' such as soil formation, photosynthesis, and nutrient cycling.<sup>44</sup>

**Environment:** The sum of all external conditions affecting the life, development and survival of an organism. In the context of this module, environment refers to the physical conditions that affect natural resources (climate, geology, hazards) and the ecosystem services that sustain them (e.g. carbon, nutrient and hydrological cycles).<sup>45</sup>

Environmental governance: Comprises the rules, practices, policies and institutions that shape how humans interact with the environment. Good environmental governance takes into account the role of all actors that impact the environment, including governments, NGOs, the private sector and civil society and includes issues of transparency, equitable benefit sharing, accountability and sustainability.<sup>46</sup>

Gender analysis: The collection and analysis of sex-disaggregated information. Men and women perform different roles in societies and in armed groups and forces. This leads to women and men having different experience, knowledge, talents and needs. Gender analysis explores these differences so that policies, programmes and projects can identify and meet the different needs of men and women. Gender analysis also facilitates the strategic use of distinct knowledge and skills possessed by women and men, which can greatly improve the long-term sustainability of interventions. In the context of DDR, gender analysis should be used to design policies and interventions that will reflect the different roles, capacity and needs of women, men, girls and boys.

Gender division of labor: This is the result of how each society divides work between men and women according to what is considered suitable or appropriate to each gender. Attention to the gendered division of labor is essential when determining reintegration opportunities for both male and female ex-combatants, including women and girls associated with armed forces and groups in non-combat roles and dependents. **Integrated water resources management:** The Global Water Partnership defines this as "a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems." 47

**Livelihoods:** The building blocks of livelihoods are referred to as capital assets. Traditionally defined by DFID, there are five types of livelihoods capital. UNDP's definition includes a sixth type, political capital. The main five include human capital (skills, knowledge, experience, and capacities), natural capital (natural resources such as water, land, forests, and minerals), physical capital (infrastructure, water and sanitation facilities, information and communication technology, housing, schools, health facilities, and other community and government structures), financial capital (such as savings, credit, remittances, enterprise holdings, insurance, pensions, and livestock), political capital (access to and participation in decision making processes), and social capital (networks, group memberships, and social relationships). In conflict and post-conflict situations, capital assets are easily lost, destroyed, or stolen. The capacity to preserve or recoup these capital assets determines the impact of a conflict on livelihoods.<sup>48</sup>

Natural resource management: Activities related with the management of natural capital stocks, (monitoring, control, surveys, administration and actions for facilitating structural adjustments of the sectors concerned) and their exploitation (e.g. abstraction and harvesting).49

**Natural resources:** Natural resources are actual or potential sources of wealth that occurs in a natural state, such as timber, water, fertile land, wildlife, minerals, metals, stones and hydrocarbons. A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable to its rate of consumption by humans or other users. A natural resource is considered non-renewable when it exists in a fixed amount, or when it cannot be regenerated on a scale comparative to its consumption. A natural resource is considered lootable if it is easily extracted with minimal skill and technology and at low financial cost. The destruction of natural resources and key habitats is often a result of violent conflict.50

Resource curse: "The resource curse – also known as the paradox of plenty – describes the phenomenon whereby countries that are rich in natural resources such as oil, gas or minerals, end up poorer and more unequal than countries without them. This can be because of corruption, a decline in the competitiveness of other economic sectors, and volatility on commodity markets."51

Value chain: the full range of interrelated productive activities performed by firms in different geographical locations to bring out a product or a service from conception to complete production and delivery to final consumers.<sup>52</sup>

**Watershed:** The region draining into a river, river system, or other body of water.

# ANNEX B: Questions to Consider and Measurable Indicators for DDR and NRM

# Key questions: Disarmament and demobilization

- Where applicable, have environmental concerns been taken into consideration when planning and implementing disarmament and demobilization sites and phase-out processes?
- If weapons are used as a primary means of accessing natural resources necessary for livelihoods, have alternative means been determined?
- Where applicable, to what extent did DDR staff working at disarmament and demobilization sites engage with participants, beneficiaries, host communities, and the host government to ensure that any negative impacts or environmental damage associated with the location and running of sites was minimized?

#### Measurable indicators

- Number of NRM trainings conducted per camp/site.
- Number of ex-combatants involved in natural resource extraction as part of armed force or armed group activities.
- Number of and level of complaints that programme staff received from participants, beneficiaries, host communities or the host government on the mismanagement of natural resources by the DDR programme and/or its participants, which impact negatively upon local livelihoods, health and/or safety (i.e. deforestation, land degradation, water resource depletion, reduced availability of fuel or housing materials, reduced availability of medicines or wild game derived from nearby forests, etc.).
- Number of DDR programme planning meetings that included representatives from the community (including women and men of different age groups) and host government concerned with NRM issues.
- Number of NRM experts that were interviewed by programme staff to collect information on environmental and sustainability issues associated with camp/site management, phase-out and closure.
- Number of community representatives (sex- and age-disaggregated) and government officials that were interviewed by programme staff to collect information on environmental and sustainability issues associated with camp/site management, phase-out and closure.

#### **Key questions: Reinsertion**

- To what extent did the DDR programme engage its participants and beneficiaries in labour-intensive quick impact project opportunities (e.g. infrastructure projects and ecosystem restoration) that included the restoration of key natural resource sectors identified as important for public health, safety and sustainable livelihoods?
- To what extent were various stakeholders, including representatives of women, youth and other often excluded groups, and the NRM community consulted during the implementation of these projects to ensure environmental sustainability and good management practices?

■ To what extent were the specific needs of women, youth and persons with disabilities, their dependence on natural resources and associated risks taken into account in the design of reinsertion activities? Were opportunities to created income generating activities from the sustainable use of natural resources considered for these groups?

#### Measurable indicators

- Number/percentage of programme participants engaged in infrastructure projects (i.e. sanitation, waste management, and water provisioning and purification) to support efficient use of natural resources for public health, safety and livelihoods opportunities.
- Number/percentage of programme participants engaged in projects to rehabilitate key ecosystems that are crucial to livelihoods and disaster risk reduction (DRR).
- Number of NRM experts, community representatives (sex- and age-disaggregated) and government officials that participated in the planning and/or implementation of natural resource based labour-intensive quick impact project opportunities.
- Number of women, youth and persons with disabilities that participated in reinsertion opportunities in the natural resource sectors.
- Number of and level of complaints that programme staff received from participants, beneficiaries, host communities or the host government on the mismanagement of natural resources by the DDR programme and/or its participants during reinsertion.

## **Key questions: Reintegration**

- To what extent did the reintegration programme provide ex-combatants with economic opportunities in natural resource sectors?
- Where applicable, to what extent did the reintegration programme diversify economic opportunities so as to reduce dependence on a limited number of natural resources and primary commodities?
- To what extent did the reintegration programme contribute to reconciliation (i.e. dialogue, cooperation and confidence-building) through natural resource management?
- To what extent were women, youth and disabled provided reintegration opportunities in and access to natural resources?
- To what extent was equality of access for women in all natural resource sectors for employment promoted and awareness-raising conducted, including in those sectors which have traditionally been limited to men?
- To what extent were stakeholders, including representatives of women, youth and other often excluded groups, and the NRM community consulted during the implementation of reintegration activities to ensure environmental sustainability and good management practices?
- To what extent and how natural resource management contributes to the sustainability of reintegration interventions?

#### Measurable indicators

Number/percentage of programme participants employed within licit natural resource sectors.

- Type and number of licit natural resource sectors in which ex-combatants were employed.
- Number of NRM trainings (disaggregated by natural resource sector).
- Number/percentage of women, youth and persons with disabilities that participated in NRM trainings.
- Number of trainings provided on negotiation and mediation techniques for natural resource management for programme staff, national counterparts and implementing partners?
- Number of information/media campaigns conducted in each community to inform participants, beneficiaries and communities of natural resource management issues and employment opportunities.
- Number of women, youth and persons with disabilities employed in natural resource sectors.
- Type and number of licit natural resource sectors in which women, youth and persons with disabilities were employed.
- Number of NRM experts that were interviewed by programme staff to collect information on sustainable economic reintegration opportunities in natural resource sectors.
- Number of community representatives (sex- and age-disaggregated) and government officials that were interviewed by programme staff to collect information on sustainable economic reintegration opportunities in natural resource sectors.
- Number of NRM experts, community representatives (sex- and age-disaggregated) and government officials that participated in the planning and/or implementation of natural resource based livelihood opportunities.
- Number of and level of complaints that programme staff received from participants, beneficiaries, host communities or the host government on the mismanagement of natural resources by the DDR programme and/or its participants during reintegration.

#### Key questions: Programme staff, budgeting and workflows

- To what extent were natural resource/environment-related risks and opportunities incorporated into conflict analysis, assessments, programme planning and implementation?
- Were a sufficient number of staff and consultants appointed to specifically handle NRM-related issues and activities?
- Were responsibilities related to natural resources included in the Terms of References (ToRs) of DDR programme personnel?
- To what extent does the programme coordinate and partner with the NRM community and experts?
- To what extent were sufficient funds allocated for environmental and NRM-related issues and activities?

#### Measurable indicators

 Number and type of programme assessments and analyses that addressed natural resource management issues.

- Number of DDR programme planning meetings that included NRM experts.
- Number and type of partners from NRM community involved in programme assessments, design and implementation.
- Number/percentage of DDR staff and consultants specifically assigned as responsible for NRM-related issues.
- Number/percentage of staff trained in environmental and NRM-related issues.
- Percentage of resources allocated for environmental and NRM-related activities.
- Percentage of resources allocated for NRM experts, staff and consultants assigned to handle environmental and NRM-related issues (compared with other staff).

# ANNEX C: Sample questions for specific needs analysis in regard to natural resource management in DDR

ASSESSMENT	QUESTIONS TO ASK
Conflict and	Who in the communities/society/government/armed groups benefits from the natural resources that were implicated in the conflict?
security analysis	Who has access to and control over lootable natural resources? What is the role of
	<ul><li>armed groups in this?</li><li>Who has access to and control over land, water and non-extractive resources? What is the role of armed groups in this?</li></ul>
	<ul> <li>the role of armed groups in this?</li> <li>What are the implications for those who do not carry arms (e.g. security and access to control over resources)?</li> </ul>
	<ul><li>control over resources)?</li><li>Who are the most vulnerable people in regard to depletion of natural resources or</li></ul>
	<ul><li>contamination?</li><li>Which groups face constraints in regard to access to and ownership of capital assets?</li></ul>
Disarmament	Who within the armed groups or in the communities carry arms?
	What are the implications of disarmament and stockpile management sites for local communities' livelihoods and access to natural resources? Are the implications different for women and men?
	What are the reasons for male and female members of armed groups to carry arms (e.g. lack of alternative livelihoods, lootability of natural resources, status)?
	What are the reasons for male and female community members to carry arms (e.g. access to natural resources, protection, status)?
Demobilization	How do cantonments or other demobilization sites affect local communities' access to natural resources?
Deinesakien	How are women and men affected differently?
Reinsertion	<ul><li>What are the infrastructure needs of local communities?</li><li>What are the differences of women and men's priorities?</li></ul>
	In order to act in a manner inclusive of all relevant stakeholders, whose voices should be heard in the process of planning and implementing reinsertion activities with local communities?
	What are the traditional roles of women and men in labour market participation? What are the differences between different age groups?
	Do women or men have cultural roles that affect their participation (e.g. child care roles, cultural beliefs, time poverty)?
	What skills and abilities are required from participants of the planned reinsertion
	<ul> <li>Are there groups that require special support to be able to participate in reinsertion activities?</li> </ul>
Reintegration	What are the gender roles of women and men of different age groups in the community?
	What decisions do men and women make in the family and community?
	Who within the household carries out which tasks (e.g. subsistence/breadwinning, decision making over income spending, child care, household chores)?
	What are the incentives of economic opportunities for different family members and who receives them?
	Which expenditures are men and women responsible for?
	<ul><li>How rigid is the gendered division of labor?</li><li>What are the daily and seasonal variations in women and men's labor supply?</li></ul>
	Who has access to and control over enabling assets for productive resources (e.g. land,
	finances, credit)?  Who has access to and control over human capital resources (e.g. education, knowledge, time, mobility)?
	■ What are the implications for those with limited access or control?
	<ul> <li>How do constraints under which men and women of different age groups operate differ?</li> <li>Who are the especially vulnerable groups in terms of access to natural resources (e.g. women without male relatives, internally displaced people, female-headed households, youth, persons with disabilities)?</li> </ul>
	<ul> <li>What are the support needs of these groups (e.g. legal aid, awareness raising against stigmatization, protection)?</li> </ul>
	Who are the especially vulnerable groups in terms of knowledge and skills relating to natural resource management (e.g. women without male relatives, internally displaced people, female-headed households, widows, persons with disabilities)?

# Endnotes

- Natural resources are actual or potential sources of wealth that occur in a natural state, such as timber, water, fertile land, wildlife, minerals, metals, stones and hydrocarbons. A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable to its rate of consumption by humans or other users. A natural resource is considered non-renewable when it exists in a fixed amount, or when it cannot be regenerated on a scale comparative to its consumption.
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