MINING IN SOUTH SUDAN: OPPORTUNITIES AND RISKS FOR LOCAL COMMUNITIES

BASELINE ASSESSMENT OF SMALL-SCALE AND ARTISANAL GOLD MINING IN CENTRAL AND EASTERN EQUATORIA STATES, SOUTH SUDAN
FOREWORD

We are delighted to present you the findings of an assessment conducted between February and May 2015 in two states of South Sudan. With this report, based on dozens of interviews, focus group discussions and community meetings, a multi-disciplinary team of civil society and government representatives from South Sudan are for the first time shedding light on the country’s artisanal and small-scale mining sector.

The picture that emerges is a remarkable one: artisanal gold mining in South Sudan ‘employs’ more than 60,000 people and might indirectly benefit almost half a million people. The vast majority of those involved in artisanal mining are poor rural families for whom alluvial gold mining provides critical income to supplement their subsistence livelihood of farming and cattle rearing. Ostensibly to boost income for the cash-strapped government, artisanal mining was formalized under the Mining Act and subsequent Mineral Regulations. However, owing to inadequate information-sharing and a lack of government mining sector staff at local level, artisanal miners and local communities are not aware of these rules. In reality there is almost no official monitoring of artisanal or even small-scale mining activities.

Despite the significant positive impact on rural families’ income, the current form of artisanal mining does have negative impacts on health, the environment and social practices. With most artisanal, small-scale and exploration mining taking place in rural areas with abundant small arms and limited presence of government security forces, disputes over land access and ownership exacerbate existing conflicts. Illicit trade and cross-border smuggling of gold compound the problem.

To overcome the current secretive nature of mining in South Sudan, better stakeholder engagement and in particular community consultation is urgently needed. To avoid the human, environmental and economic disaster of the oil industry in South Sudan, government and mining companies need to invest in specialized staff, strategies and programmes for community engagement and development. Similarly, international donors should realize that technical assistance for a better institutional and regulatory mining framework has limited practical impact without a commensurate effort in assistance for community engagement.

This report comes at a time when armed conflict between the Government of South Sudan and various rebel factions is still continuing, resulting in more casualties and displacement on a daily basis. We understand that current international efforts are geared primarily towards ending the conflict and providing humanitarian assistance. Nevertheless, a sustainable peace in South Sudan will require transparent and accountable governance of its natural resources in a way that delivers practical benefits for local communities. This report provides suggestions for developing more appropriate and realistic protocols ensuring that mining benefits local communities and might even contribute to a more lasting peace in South Sudan.

Jeroen de Zeeuw
Programme Manager Extractives, Cordaid
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<th>Description</th>
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<tbody>
<tr>
<td>ASI</td>
<td>Adam Smith International</td>
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<tr>
<td>ASM</td>
<td>Artisanal and Small-Scale Mining</td>
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<td>AusAID</td>
<td>Australian Aid</td>
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<td>CBO</td>
<td>Community Based Organization</td>
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<td>CDA</td>
<td>Community Development Agreement</td>
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<td>CDF</td>
<td>Constituency Development Fund</td>
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<td>CMERIC</td>
<td>Consolidated Minerals and Energy Resources Investment Company Ltd</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CES</td>
<td>Central Equatoria State</td>
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<td>CHF</td>
<td>Common Humanitarian Fund (for South Sudan)</td>
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<td>CHIP</td>
<td>Centre for Health Policy and Innovation</td>
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<tr>
<td>Cordaid</td>
<td>Catholic Organization for Relief &amp; Development Aid</td>
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<tr>
<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
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<td>CSO</td>
<td>Civil Society Organization</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>CU</td>
<td>Cadastral Unit</td>
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<td>DG</td>
<td>Director-General</td>
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<td>DPOC</td>
<td>Dar Petroleum Operating Company</td>
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<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
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<tr>
<td>ECOS</td>
<td>European Coalition on Oil in Sudan</td>
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<td>ECS</td>
<td>Episcopal Church of Sudan</td>
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<td>EES</td>
<td>Eastern Equatoria State</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EQ</td>
<td>Equator Gold</td>
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<td>ESIA</td>
<td>Environmental and Social Impact Assessment</td>
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<td>EU</td>
<td>European Union</td>
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<td>g</td>
<td>gram</td>
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<tr>
<td>GONU</td>
<td>Government of National Unity</td>
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<td>GoS</td>
<td>Government of Sudan</td>
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<td>GoSS</td>
<td>Government of Southern Sudan</td>
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<td>GRSS</td>
<td>Government of the Republic of South Sudan</td>
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<tr>
<td>HSE</td>
<td>Department of Health, Safety and Environment</td>
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<tr>
<td>IGAD</td>
<td>Intergovernmental Authority on Development</td>
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<tr>
<td>JOC</td>
<td>Joint Operation Company</td>
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<tr>
<td>KADO</td>
<td>Karpeto Development Organisation</td>
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<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MP</td>
<td>Member of Parliament</td>
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<td>MPM</td>
<td>Ministry of Petroleum and Mining</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NKEIM</td>
<td>New Kush Exploration &amp; Mining Company Ltd.</td>
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<tr>
<td>NPA</td>
<td>Norwegian People's Aid</td>
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<td>PACT</td>
<td>US NGO</td>
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<td>PAX</td>
<td>Dutch peace organization partnership between IKV (Interchurch Peace Council) and Pax Christi</td>
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<tr>
<td>PHCC</td>
<td>Primary Health Care Centre</td>
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<tr>
<td>PHCU</td>
<td>Primary Health Care Unit</td>
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<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
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<tr>
<td>RECONCILE</td>
<td>Resource Centre for Civil Leadership (Yei)</td>
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<td>SAF</td>
<td>Sudan Armed Forces</td>
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<td>SCD</td>
<td>Society for Civic Development</td>
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<td>SCOOP</td>
<td>South Sudan Cooperative</td>
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<tr>
<td>SDG</td>
<td>Sudanese Pound</td>
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<tr>
<td>SLA</td>
<td>State Legislative Assembly</td>
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<tr>
<td>SNV</td>
<td>Netherlands Development Organization</td>
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<tr>
<td>SPLM/A</td>
<td>Sudan People’s Liberation Movement/Army</td>
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<td>SPLA</td>
<td>Sudan People’s Liberation Army</td>
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<td>SPLM</td>
<td>Sudan People’s Liberation Movement</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<td>SSLA</td>
<td>South Sudan Legislative Assembly</td>
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<td>SSP</td>
<td>South Sudanese Pound</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNMISS</td>
<td>United Nations Mission in South Sudan</td>
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<td>UNS</td>
<td>Upper Nile State</td>
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<tr>
<td>USIP</td>
<td>United States Institute of Peace</td>
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<tr>
<td>VNG-I</td>
<td>International Cooperation Agency of the Association of Netherlands Municipalities</td>
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<tr>
<td>WBeG</td>
<td>Western Bahr El-Gazal State</td>
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<td>WES</td>
<td>Western Equatoria State</td>
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<tr>
<td>ZOA</td>
<td>Christian international NGO</td>
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- Lowila Daniel Stephen, South Sudan Law Society (SSLS)
- Martin Owinja, Eastern Equatoria State Ministry of Finance, Commerce, Investment and Economic Planning – Department of Investment and Mining, Kapoeta
This baseline assessment was carried out in collaboration with the following partners:

**Ministry of Petroleum and Mining**
The Ministry of Petroleum and Mining (MPM), established after independence, is one of the key ministries within the Economic cluster. The ministry is guided by both the Petroleum Act 2012 and the Mining Act 2012, as well as the Mineral Title Regulations 2015 and other bills which are currently being drafted to implement its mandate.

The Ministry of Petroleum and Mining is divided into two sectors, the Petroleum Sector and the Mining Sector. The latter is headed by an under-secretary and is composed of two directorates, the Directorate of Geological Survey and the Directorate of Mineral Development, both of which actively participated in the baseline research for this report.

The Directorate of Mineral Development is mandated to manage the mineral resources of the country on behalf of the people of South Sudan as stipulated in the interim constitution of South Sudan. The Directorate welcomes partners to participate in the development of the country’s mineral resources to ensure sustainable development and prosperity.¹

**Central Equatoria State Ministry of Commerce, Industry, Mining and Investments**
The ministry was established after independence by a gubernatorial order. It is responsible for commerce, industry, mining and investments. It has four directorates, namely: Commerce, Industry, Mining and Investments. The Directorate of Mining and Industry, with which Cordaid carried out the baseline assessment in Central Equatoria State has three departments, namely: Department of Geological Survey, Department of Mineral Development and Department of Industry. Each department is headed by a director who reports to the Director-General of the Ministry, and the Director-General reports to the State Minister of Commerce, Industry, Mining and Investments.

**Eastern Equatoria State Ministry of Finance, Commerce, Investment and Economic Planning**
The ministry is responsible for revenue management, economic planning, commerce, investment, mining and industry at state level. It has five directorates, namely: Finance, Planning, Commerce, Investments, and Mining and Industry. The Directorate of Mining and Industry under which the assessment was coordinated in the state consists of three departments, namely: Departments of Geological Survey, Mineral Development and Industry. In August 2015 the State Secretariat announced that it would establish a separate Ministry for Commerce, Investment and Mining.

**Society for Civic Development (SCD)**
SCD is a civil society organization supporting communities in various fields, including community integrity building, awareness-raising on governance at local level, mobilization for local development, and peace-building.

**South Sudan Law Society (SSLS)**
SSLS is a voluntary association representing the legal profession in South Sudan. Its mission is to strive for justice in society and respect for human rights and the rule of law in South Sudan. SSLS manages a number of legal aid clinics that provide free legal advice, mediation and courtroom representation to clients who would otherwise be unable to afford these services. SSLS conducts research and advocacy on constitution-making process, land rights and extractive industries.²
EXECUTIVE SUMMARY

Background: South Sudan is known as an important oil producer but the country is also believed to have significant mineral resources such as gold, copper, diamonds, limestone, etc. The government is very active in promoting investment in exploration and the development of mining projects.

Artisanal gold mining takes place in a number of areas in South Sudan, and is an activity that contributes to securing the livelihoods of rural families. With the new legal framework for mining passed into law in 2012, all mining without a licence became illegal, including artisanal mining. Between November 2014 and May 2015 Cordaid, together with the Ministry of Petroleum and Mining (MPM) and the state ministries of mining of Central Equatoria and Eastern Equatoria States, as well as civil society partners, carried out a qualitative baseline assessment using field visits, interviews and focus group discussions as key methodologies.

Objective: The assessment work and resulting report aim to contribute to a process that can help to improve the framework and practice of artisanal, small- and large-scale mining with regard to community-related issues. The assessment is intended to provide a credible base for discussion and future collaboration among all key stakeholders.

History: The interview partners in the mining areas all referred to the colonial times and specifically to the 1940s and 1950s as the decades when gold mining started in their areas. After a period of lesser attention artisanal gold mining was systematically brought back by the Sudan People’s Liberation Army (SPLA) in order to obtain resources for the liberation struggle in the early 1980s. SPLA used various strategies to promote and organize mining and to ensure they got their share of the gold, including training and mobilization, taxation and marketing. A famine in Greater Kapoeta during the same period was another factor contributing to the increase of artisanal mining in these years.

Regulatory framework: Since 2005, the Government of the Republic of South Sudan (GRSS) has tried to attract investment from around the world. The new regulatory framework drawn up between 2011 and 2015 gives advantages to investors as a way of compensating for the total lack of basic infrastructure. International partners still pay relatively little attention to mining. Most support in this area so far has come from AusAID, which has offered technical assistance in the form of international consultants. According to MPM, Cordaid is the first non-governmental organization (NGO) to look into mining-related aspects of development. The GRSS is focusing on large-scale mining but most of the companies that have shown any interest to date are rather small and are interested in either small-scale mining or in exploration. None of them is able to run a major mining operation.

At national level MPM – more specifically the Directorate of Mineral Development – is in charge of all mining-related activities. The states, too, have created their respective institutional structures to regulate, organize and monitor mining activities. The Mining Act was enacted in 2012 and the Mining Regulations were signed into law in March 2015. The Mining Act, in defining its purpose, refers explicitly to sustainable development, highlighting several ambitious principles. With the mining regulations signed, a number of key issues have been resolved, mainly with regard to small- and large-scale mining. The Act recognizes the traditional rights to pan minerals from the surface, but bureaucratic procedures and restrictions have so far made it impossible for any improvements to be made to artisanal mining. The states have not yet drawn up any artisanal mining regulations that could simplify the procedures and free applicants for licences from unnecessary red tape. The actual legal framework ignores the rural poor who struggle for survival and who have found gold mining to be an additional income-generating activity that allows them to improve their daily lives.

Extent and importance: Artisanal gold mining takes place in 6 out of 10 states and in approximately 25 counties. The most important and best-known sites are in Central Equatoria State (CES) and Eastern Equatoria State (EES). Based on the interviews conducted, the team estimates that there are at least 80 different mining sites of various sizes in the country. The assessment team asked in all bomas (lowest level of administrative unit) where mining is taking place how many people carry out mining activities. The responses varied but it is very likely that the number is higher than the 60,000 miners estimated by MPM. Assuming a family size of 5 to 10 people, the number of people who to some extent benefit from artisanal mining could be more than half a million. The quantity of gold extracted per day varies from dry to rainy season, and from person to person. But it can be assumed that miners extract an average of 1–2 grams of minerals (mainly gold) a day. In most areas mining was declared to be an activity that complements farming or cattle rearing. Mining allows families to generate the cash needed for a number of basic needs, such as health, clothing and school fees.

Miners and technologies: The majority of miners in all mining sites come from the respective boma or payam where the mining site is located. However, some are from other states of South Sudan and even from neighbouring countries, specifically from Kenya, Sudan, Uganda and Democratic Republic of Congo (DRC). The miners who come from these countries have considerable mining skills and sometimes bring modern equipment such as metal detectors. In all sites women and children – not just men – are active in the mining. This report attests to the resilience and resourcefulness of artisanal miners. Most artisanal mining consists of panning for alluvial gold in streams, but in some places miners dig deeper tunnels to get the soil which they then take to the water for panning. In Budi and Kapoeta this method is employed more frequently than in the mining sites in CES. The gold found in all sites is of good quality, and mostly coarse-grained, meaning that no mercury or cyanide is required for extraction and purification.
All artisanal miners whom the team met work with inappropriate or rudimentary tools which do not enable any increase in output. Moreover, they have only limited knowledge of how to discover deposits. Most of the mining sites are inaccessible because of few or no roads. There are health risks in the mining sites, which are often far away from any settlement and health centre. Accidents occur because of a lack of appropriate technologies. The incidence of HIV/AIDS is increasing in the mining sites because of the prevalence of unprotected sex within the local communities. Environmental degradation caused by artisanal mining seems not to be a major problem, but with increasing numbers of miners, erosion and deforestation may increase.

Artisanal mining has a negative impact on food security when mining becomes the main economic activity and farming is neglected.

Often money earned through mining is not managed wisely; social problems, such as alcohol abuse, disputes between community members, prostitution and divorce are rife in many sites. Mining is attractive for children and young people and therefore many of them drop out of school, jeopardizing their own future chances.
There are complaints about insecurity at numerous mining sites, with widespread possession of small arms and an absence of any security forces in the sites.

In most of the mining sites there is only a minimum level of self-organization. Regulations set by the chiefs and landlords in the communities are mostly very flexible and tend not to be imposed in any systematic way. Only in very few cases is labour organized hierarchically.

The assessment team did not come across any initiative providing support to artisanal miners. No NGO, no international development actor and also no government service has even started to reflect on this issue. In particular, international development NGOs and agencies seem to know nothing about the artisanal mining activities that are carried out in their target areas.

In Gorom and in Karpeto the team encountered local taxation helping these communities raise funds for development projects. But these were isolated cases.

With regard to exploration and small-scale mining taking place in a number of artisanal mining sites, the assessment team found very little that could be regarded as a structured stakeholder engagement process or even an attempt at it. On the contrary, the team discovered a great deal of mistrust, misunderstandings, withholding of information, rumours and accusations. So although windows of opportunity have opened up, with a regulatory framework in place and increasing awareness of the importance of external stakeholders having constructive relations with communities, no serious stakeholder engagement is currently taking place. There is no presence of relevant government institutions in the mining and exploration areas; consequently, no monitoring, no substantial sensitization and consultation, no conflict prevention and no support are possible. Mining communities feel completely neglected and think that the government is interested only in company operations. The assessment team also gained the impression that the various directorates, departments and services concerned with mining all pay close attention to the technical aspects of mining, but they seriously neglect the community-related aspects. Furthermore, the relationship between the different levels of government is still ambiguous and competition exists between them.

There is no easily perceivable ‘win-win’ situation in the relations between the exploration companies and the communities. The communities want to see development but this fails to materialize. The exploration companies’ main concern is to prepare as quickly as possible and at low cost a mining project that is commercially viable and sellable to a major mining company. They do not want to lose time and money on the implementation of community projects. The approaches of the exploration companies on the one hand and of the small-scale mining companies on the other differ substantially. Whereas the exploration companies try to avoid making any promises and investing in any community projects, the small-scale mining companies are quick to promise projects and development in order to win the acceptance of the local communities – although, so far, very little has been implemented. Both approaches are inappropriate and have had a negative impact on relations with the communities.

The few initiatives started by companies to share information and to report on what they are doing are inadequate and mostly presented in a language that is difficult to understand. There are many things that can go wrong in stakeholder relations around mining, but the way communities are consulted sets the tone – right from the start. If consultation is not well managed it will be almost impossible to build a strong and mutually respectful relationship.

A comprehensive document setting out regulations governing the drawing-up of Community Development Agreements (CDAs), which is currently being prepared (but is not yet publicly available), will enable constructive discussion to take place on the question of development projects.

Summary of key recommendations

All recommendations aim to focus attention on artisanal miners and communities and to adapt regulations and support to suit their needs.

A – Focusing attention on artisanal miners

Formalize the actual practice of artisanal mining

An estimated half a million people in South Sudan make their living to some extent through artisanal mining. Artisanal mining, in the way it is currently carried out, has become illegal now that the regulatory framework has been adopted. In order to preserve its important contribution to livelihoods the actual practice of artisanal mining needs to be formalized. South Sudan has only just embarked on the process of formalization, and more efforts are necessary to shape future state regulations in such a way that miners’ needs are taken into account and incentives are created that encourage the miners to formalize their activities.

Instead of obliging miners to apply for a licence at state level, a simple process of registration at payam level could be introduced. In line with the opinion expressed by miners whom the assessment team met, local authorities and other interviewees recommend allowing the use of detectors and other small machinery in order to make artisanal mining more profitable and sustainable. A range of taxes could be fixed and collected by local levels of authority so as to develop resources for community development.

Give appropriate support to artisanal miners

The Directorate of Mineral Development said that artisanal miners’ training centres may be established in the country. In the context of this proposed initiative, it is recommended that steps be taken to offer support to artisanal miners to, inter alia, explore for suitable deposits; to introduce appropriate tools; to train artisanal miners in health, safety and environmental issues; to provide financial services; and to provide training and support for the creation of cooperatives for mining and marketing.
Implement regulations for mineral dealers and open up a limited space for trade

There is need to adopt a pragmatic approach by licensing and controlling specialized gold dealers and allowing gold trading by miners and general traders to continue to a limited extent.

B. Focusing attention on communities

Start a meaningful and constructive dialogue on mining’s contribution to sustainable development

The Mining Act 2012 refers explicitly to sustainable development, participation and stakeholder engagement. With this in mind, stakeholders can create a framework by engaging in a sustained dialogue process to address issues and challenges. Dialogue can produce results only when the parties are able to meet and talk on equal terms. All those taking part in meetings need to have the capacity to engage in dialogue and to have the trust and support of the people they are representing.

Dialogue could start with round tables held at different levels where stakeholders discuss specific topics, identifying the relevant issues and preparing the way for a search for solutions.

Start meaningful sensitization on community-related aspects of mining

It is important to sensitize people in a way that allows room for communities to propose recommendations that can shape the way that regulations are developed in detail at state but also at national level. Now is also the right time for MPM to develop guidelines for consultation. Community relations officers of MPM or relevant state directorates should be deployed to mining communities.

Develop constructive (artisanal mining) company–community relations

Small-scale mining is regulated through the Mining Act and its regulations, yet it is the type of mining where illegal and damaging practices are the most prevalent. As for exploration companies, there is a need to examine company–community relations. We specifically recommend that small-scale mining operations are discouraged in sites where these companies will be in direct competition with artisanal miners, and that support be given to small-scale mining companies and communities in their efforts to come to an agreement.

Regularly share important information and consult with communities

Companies should open offices in key communities of exploration and mining areas and recruit local community relations officers, or at least start seriously engaging with local communities early on. Consultation is capacity-building in two directions: the companies and governmental services learn from the miners and communities, and these gain knowledge and insights brought to them by the other stakeholders.

Start a context-specific pilot Community Development Agreement (CDA) process

South Sudan has opted for a CDA approach to promoting development in mining areas. Considering the present state of company–government–community relations, the lack of experience – in the case of all stakeholders – of how to implement a CDA, and the particular challenges of a CDA process, the assessment team recommends that a pilot CDA be started in one of the mining areas that is tailored to the South Sudanese context. This should be a joint undertaking of the relevant directorates from MPM as well as the state, exploration companies, a neutral facilitating party (e.g. Cordaid) and selected South Sudanese NGOs.

Develop appropriate concepts and procedures for compensation and resettlement

Compensation must replace the lost resource base (e.g. land) on which people had made their living, in order to secure a sustainable livelihood in future. Appropriate concepts and procedures for compensation and resettlement need to be worked out.
1. INTRODUCTION AND METHODOLOGY

1.1 Gold mining in South Sudan

South Sudan is known as an important oil producer but the country is also believed to have significant mineral resources, though very little formal exploration has been carried out since the Second World War. The government is extremely interested in, and active in, promoting investment in exploration and the development of mining projects.

According to all mining communities met as part of this research as well as the geologists who were part of the team, artisanal and small-scale gold mining in South Sudan dates back to colonial times. Artisanal gold mining, and also small-scale mining using some machinery, takes place in a number of areas spreading from Western Bahr el-Ghazal (WBeG), Western Equatoria State (WES), CES and EES to Jonglei and even Upper Nile State (UNS). With the new legal framework for mining passed into law in 2012, all mining without a licence became illegal, including artisanal mining.

Artisanal gold mining is an activity that contributes to securing the livelihoods of rural families. Development actors, including NGOs, bi- and multilateral development institutions and governmental departments, are mostly ignorant of the ongoing artisanal mining activities. Apart from some press articles there is no literature available on artisanal mining, even though it has existed for so long.

No serious exploration for large-scale mining was possible for six decades because of the wars. However, in 2005 exploration re-started and today there is sufficient information to confirm considerable potential for large-scale mining in South Sudan. Looking at the existing infrastructure in the country it might be concluded that it could still take years before any major investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place. However, the Kibali gold mine in DRC shows that if a deposit is important enough investment to take place.

The Mining Act was adopted in 2012 and Mining Regulations were signed in March 2015. The government has scaled up efforts to organize the sector by putting substantial efforts into the promotion and regularization of large-scale mining.

There are numerous challenges surrounding artisanal, small-scale and large-scale mining. High priority should be given to looking specifically into artisanal mining as well as community-related aspects of small- and large-scale mining. Even with the mining regulations in place a number of aspects need to be further refined at national, state and local levels. Communities should have a say when regulations are being implemented and particular aspects of them are being refined in order to ensure that mining will contribute to development in the communities.

The assessment, the present report, and the validation meeting that took place in December 2015 are intended to be a meaningful contribution to this process: attention needs to be focused on communities and artisanal miners.

1.2 Cordaid in South Sudan

Cordaid is the Catholic Organization for Relief & Development Aid. With its headquarters based in the Netherlands, it is currently active in 38 fragile contexts and/or conflict-affected countries.

Cordaid has supported a broad range of civil society initiatives in South Sudan since the end of the 1980s. Focusing on civil society capacity-strengthening but also engaging (local) government actors, Cordaid has been particularly active in the areas of health, disaster risk reduction and response, food security, entrepreneurship, women’s leadership, security and justice, and extractives.

The Cordaid programme on extractives in South Sudan started in 2011 and supports communities and civil society organizations (CSOs) to become better-informed and stronger partners in a constructive dialogue with government and oil companies. Cordaid is currently supporting a number of projects aimed at community empowerment and strengthening the organizational and technical capacity of CSOs.

Oil and mining are important economic activities in South Sudan, with great potential for the development of the nation. However, for communities there are also significant risks related to oil and mining. To minimize such risks and to ensure that oil and mining will benefit all citizens in South Sudan, Cordaid supports different stakeholders to engage with each other constructively, apply international standards and best practices, and build trust.

1.3 Methodology of the baseline assessment

Cordaid started engaging with the extractives sector in South Sudan with a baseline assessment and validation meetings on the impact of oil production in 2013. The process included support to partners working in the oil producing counties as well as exchanges and joint capacity-building with MPM and the joint operating companies (JOCs).

Because of the importance of the mining sector Cordaid suggested that a process of reflection around gold mining should be started with all stakeholders involved. A baseline assessment was seen as an appropriate tool to start this process. This process is intended to be a contribution to the improvement of the framework and practice of artisanal, small- and large-scale mining with regard to community-related issues. It aims to help stakeholders engage constructively with each other for the improvement of the livelihood of communities. The assessment is intended as a credible base for discussion and future collaboration among these stakeholders.

In line with Cordaid’s capacity-building approach and based on previous experiences with baseline assessments in Upper Nile...
and Unity states and in Turkana County (Kenya), it decided to employ a participatory research methodology. Instead of hiring a team of external experts, it specifically opted for a collaborative (albeit challenging) research approach that allowed staff of partner organizations to learn in the field and to bring in valuable experiences and knowledge so as to create synergy and nurture relationships.

In order to be sure of having team members from different backgrounds, a variety of partners were invited to participate in the assessment. And in order to get the support of other actors involved, as many stakeholders as possible were been interviewed or informed, including representatives of national, state and county authorities, Members of Parliament and representatives of companies and NGOs.

The assessment was preceded by a short practical training workshop in Juba, during which the team members shared know-how and experiences and together defined the research topics to be explored. On the basis of the topics selected, the team devised the various research methods and tools for the assessment, resulting in a combination of: desk study; observation; semi-structured interviews; focus groups; and informal meetings. Comprehensive notes were taken from all interviews. These notes were the primary source for the write-up of this report.

Most of the artisanal mining sites are located in CES and EES. Therefore the assessment focused on these two states, where various artisanal mining communities were visited. Two team members visited Gorom, Juba County, in November 2014. The complete team visited Lobonok and Ganji payams in Juba County as well as Wonduruba Administrative Area in February and March 2015. Three team members visited places in Kapoeta East and Kapoeta South as well as in Budi County in May 2015.

At community level the team met miners, chiefs, elders, youth, traders, church leaders and administrators, in an informal way, individually and in focus groups. In a second stage a bigger meeting with representatives from different bomas and groups was organized. In total the team met approximately 200 community members. Since the assessment team could not visit all the states and counties in which artisanal mining activities are conducted, a questionnaire was prepared, and filled in by six knowledgeable people in these other states, as a means of collecting additional information.

The findings and the responses from the communities were discussed with other stakeholders such as county and payam administration representatives, neighbouring payams, staff of health centres, and companies. Interviews with two exploration companies, two small-scale mining companies and the College of Natural Resources & Environmental Studies,
After careful triangulation of all research findings during and after the assessment, we believed it was important to give all stakeholders an opportunity to reflect on the findings and provide their perspective and feedback. For this reason, in early December 2015 Cordaid, together with MPM, organized a validation meeting in Juba. The meeting was attended by representatives from all the communities, MPM's Directorate of Mineral Development, the CES Directorate of Industry and Mining and the EES Department of Investment and Mining, as well as from civil society and international NGOs, and discussed the findings and recommendations of this assessment. The discussion, together with other presentations by the Under-secretary and the Director-General of MPM's Directorate of Mineral Development, the Deputy Director of the CES Directorate and the South Sudan Law Society (SSLS), participants were able to gain insights into many aspects of mining, including the mineral potential of South Sudan, exploration and large-scale mining, artisanal mining licensing, and stakeholder engagement principles. The draft findings were validated and the recommendations formulated by the assessment team were endorsed. All agreed that it was high time to focus attention on artisanal miners and communities, and to develop appropriate strategies to support artisanal miners as well as the communities that live in (potential) mining areas.

University of Juba, completed the picture. Several interviews and sharing of information with staff from the Directorate of Mineral Development helped to double-check data collected. Interviews were carried out with more than 50 people from all backgrounds. For an overview of interviewees and focus group meetings, see Annex I.

Maps were drawn up using GPS coordinates taken by the team, available topographical and thematic maps, and satellite images available on the internet. The teams also analysed a number of other articles and documents, either because they were particularly helpful for understanding the context or because they covered aspects the assessment team did not have time to look into.

The team encountered particular difficulties related to the secretiveness that surrounds gold mining in South Sudan. This secretiveness leads to rumours and accusations of all kinds which are often impossible to verify but which create an overall climate of mistrust and competition. Communities in particular mistrust companies, government, and any foreigners who show an interest in the local mineral resources. However, with different approaches, a lot of patience and multiple interviews it was possible to obtain good data for our analysis. Communities in Lobonok, Ganji and Wonduruba, on the other hand, would not allow us to visit the mining sites in their areas.
2. MINING IN SOUTH SUDAN

2.1 Geology and indicators for interesting deposits
South Sudan is basically unexplored because recurring civil wars made mineral exploration impossible for decades. According to a report published by the United States Institute of Peace (USIP) in 2013 and confirmed by MPM, the few available scientific studies on minerals in South Sudan date back to the 1970s and early 1980s. These studies identified a number of mineral deposits, including gold, copper, lead, zinc, nickel, marble, and various rare earth metals, although they did not conclusively determine the commercial viability of extracting them. In addition, some important academic research had been carried out, such as the work of the current Under-secretary for Mining, Dr Andu Ezbon Adde, for his PhD thesis on Ganji and Kapoeta.

"There are a vast number of metallic minerals spread all over South Sudan: gold, copper, zinc, lead, manganese, iron, silver, tin, etc. Also industrial minerals exist: marble, limestone, dolomite, kaolin, clay, asbestos, etc." Gold occurs in the south-western and south-eastern parts of South Sudan – in the crystalline, basement rocks. The gold occurrences in most of CES, including the visited payams of Lobonok, Ganji and Wonduruba seem to be along the Aswa Shear Zone, a faulted, sheared rocks zone, some 16 km wide, which enters South Sudan at Nimule and goes far beyond the north-western borders of South Sudan, and entering Darfur in Sudan.

To date there are no large-scale mines in South Sudan and there is no scientific evidence that the country has any gold deposits worth being mined industrially. Nevertheless, there are a number of indicators that make exploration interesting, including widespread artisanal mining, existence of rocks that may contain gold in the whole south and west of the country and, last but not least, the presence of the Kibali gold mine just across the border in DRC. The Kibali mine is thought to have the largest gold deposits in Africa, and to be one of the largest in the world, with estimated deposits of 34 million ounces.

The mineral potential of South Sudan is recognized by the private sector: "For mining companies it is interesting to go to frontier mining areas like South Sudan. In Australia there are only small deposits. In South Africa gold is found very deep and so it is extremely costly to mine. So it is logic to go to places where there is high chance to find gold deposits near to the surface, like in South Sudan; that is why we are here."

GEOLOGICAL MAP OF SOUTH SUDAN
Simplified geological and mineral occurrence of South Sudan
2.2 Artisanal mining sites
Artisanal gold mining is found in 6 out of the (previously) 10 states in South Sudan and in around 20 counties: CES – Juba, Wonduruba administrative area, Morobo, Kajo-Keji, South Yei, Lainya; EES – Kajo-Keji, Kajo-Keji, South Yei, Lainya; CES – Juba, Wonduruba Administrative Area, Morobo, Kajo-Keji, South Yei, Lainya; CES – Juba, Wonduruba Administrative Area, Morobo, Kajo-Keji, South Yei, Lainya; CES – Juba, Wonduruba Administrative Area, Morobo, Kajo-Keji, South Yei, Lainya; CES – Juba, Wonduruba Administrative Area, Morobo, Kajo-Keji, South Yei, Lainya. The team estimates, on the basis of the interviews, that there are at least 80 mining sites of various sizes in the country. Most of the artisanal mining takes place in CES, south of Juba and between Kajo-Keji, Narus and Chukudum in EES. These are also the areas for which exploration licences have been granted (see map above).

2.3 Overview of payams and counties visited
Lobonok payam is located south-east of Juba and borders Rejaf Payam in the north, Eastern Equatoria State, Magwi County in the east, Kajo-Keji County in the south and Ganji and Bungo Payams in the west. Ganji payam is located south of Juba and borders Rejaf payam in the north, Lobonok in the east, Pojulu and Nyagwara payams of Lainya County in the south and Wonduruba in the west. Wonduruba Administrative Area in CES was previously a payam and is located approximately 86 km from Juba city. It is bordered in the north by Dollo Payam, to the east by Bungu and Ganji payams, to the south by Lainya County and to the west by Western Equatoria State.

Greater Kajo-Keji is the name given to the eastern half of Eastern Equatoria State in South Sudan, and was at one time an administrative region with headquarters in the town of Kajo-Keji. Greater Kajo-Keji was divided into Budi County and Kajo-Keji North, South and East counties. Budi County is located in the south of Eastern Equatoria state, bordered by Uganda to the south, Ikotos County to the south-west, Lafon County to the north-west, and Kapoeta to the north-east. Chukudum, the headquarters of Budi County, lies on the southern side of a range of mountains that rises approximately 2,000 m above sea level. Kajo-Keji East County is bordered by Kenya to the south, Ethiopia to the east and Jonglei state to the west. The county is administratively divided into the Natinga, Narus,
The pastoral people such as the Toposa own large numbers of cattle as well as sheep and goats. They graze their animals near their villages in the rainy season, and then move them to dry-season pastures when the rains end, gradually moving back to the village which they reach the start of the next rainy season. The narrow range of cultivated crops making up the food base renders the Greater Kapoeta counties highly vulnerable to erratic weather patterns. Because of conflicts, droughts and the lack of roads and agricultural services, famines are frequent in EES. Support from former inhabitants who have received a good education and now earn their living in Juba or outside the country seems to have some importance, but mainly in Juba County.

Development efforts and infrastructure
Infrastructure is poor in all places visited and development efforts tend to be few and far between. Projects are run or funded by government funds such as the Constituency Development Fund, and by international donors and NGOs. Because many internally displaced persons (IDPs) have settled in the areas, humanitarian agencies are present and give them the support that they need.

There are primary schools and a few secondary schools in the areas visited, but the coverage is insufficient, and most of the schools are short of teachers and government assistance. There are no doctors in the rural health centres. Several schools and health facilities are run by churches.

Roads are often in a poor shape. The telephone network is mostly available along the main roads. Kapoeta is the only town in the areas visited that has electricity, from an 894-kW high-speed diesel power plant. This was built in 2011 with funding from USAID.

Development initiatives to date are far from meeting the basic needs of the communities.
In a study commissioned by VNG-I, Cordaid and PAX the author describes, as main drivers of conflict, a number of factors that will not be eliminated or mitigated in the foreseeable future: “… marginalisation and lack of perspectives for youth; competition for resources particularly grazing land; the bride wealth institution; the principle of retaliation, the lack of structures that enable government and community leadership to consult on policies and regular confrontation between government and parts of the communities; the decline of traditional authority and the loss of the social fabric; proliferation of small arms and the cross-border trade of raided cattle.”

There are difficult times ahead, and mining of whatever type can either become part of the solution by creating brighter prospects for the communities, or else exacerbate the above-mentioned factors and conflicts. Disaffected youth with no promise of employment or education will continue to be a source of possible insecurity if their problems are not urgently addressed.

**ARTISANAL MINING IN LOBONOK PAYAM**

Security and conflicts

There are security concerns in all places visited. The most stable payam seems to be Lobonok. All the others have seen major insecurity, communal violence and war in recent months. Common problems are conflicts over cattle raiding and grazing lands, between pastoralists and agriculturalists or between different pastoralist groups. The customs and arrangements that helped to prevent violence in the past disappeared with the wars. In EES the conflicts escalated during two decades into violent confrontations. In CES these specific conflicts intensified with the war, which broke out in December 2013.

Insecurity is a serious threat to artisanal mining but also to exploration. In some areas artisanal mining seems to be controlled by criminal networks who do not hesitate to use violence to protect their interests.
ARTISANAL MINING IN WONDRUBA AND GANJI PAYAM

From other counties and states as well as foreigners, including Ugandans, Kenyans, Sudanese and Congolese. The following maps show the approximate location of mining sites in the counties and payams visited, including Lobonok, Wonduruba, Ganyi, Kapoeta and Budi.

Gold occurrences in Lobonok Payam (60 km south of Juba) are found in four bomas: Karpeto, Kaleng, Kit 1 and Yapa. The areas where gold is found east of Karpeto are called Nyankir and Gumesi, nearly 18 km from the main road. Gold is mined along Karpeto River, Kamuli stream, Kanyuki stream, Lusapok stream, Ariga stream, Wodorengak stream and Muli stream. There are approximately 12 camps where the miners live.

The mining site of Yapa is situated about 18 km east of Yapa centre. The sites are on the Kanuri stream (which is most probably a tributary of Kit River), at the foot of a small hill. Access is possible only on foot.

There are numerous mining sites in GANJI PAYAM. The streams and rivers where people mine are Togolo stream (on the Wonduruba side), Kolia stream (between GANJI payam and Wonduruba administrative area), Lojialan stream (a tributary of Luri River), Wawa stream (north-east of Kidi hills, and also a tributary of Luri River), and Luri River, where most of the gold is concentrated. Luri River originates in Lainya but gold occurs in Ganji. Then there is gold in the Papa stream (Kulippa boma),

addressed. The development of criminal gangs outside the reach of traditional conflict mitigation mechanisms and government security organs could potentially become the major factor driving instability in communities. Possession of small arms is widespread and this is a major factor behind violence and insecurity, yet it is extremely difficult to control them in these border areas. People need weapons to protect their cattle, their households and their families. Communities feel the need to arm themselves for self-defence and deterrence because violent conflicts over pasture and water resources are common.

For many years the Toposa people of Kapoeta have exchanged cross-border cattle raids with the Turkana people of Kenya, and have been involved in conflict over pasture and access to water points. The two governments began intensive bottom-up conflict resolution approaches in May 2010. A number of national and international NGOs, including the Justice and Peace Commission of the Catholic Diocese of Torit and the Dutch NGO PAXs, are working for peace and conflict transformation in a number of counties along the borders, including Kapoeta East and Budi.

Mining sites
Gold occurs in placer deposits (alluvial deposits) in seasonal streams, on river banks, and along hill slopes. The miners are native to the areas but in all mining sites there are also people from other counties and states as well as foreigners, including Ugandans, Kenyans, Sudanese and Congolese. The following maps show the approximate location of mining sites in the counties and payams visited, including Lobonok, Wonduruba, Ganyi, Kapoeta and Budi.

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Anak-nak is the best known site. The villages of Anak-nak boma are as follows: Lumongole, Kangatung, Bilinye, Apilinyong, Lokoporonyang and Alabaley. All villages are said to have gold deposits.16

The main mining sites in Budi County are in Ngauro payam but there are also some sites next to Chukudum, such as Monita and Lothigira bomas in Homiri payam and Maji and Ngathilani bomas in Loudo payam. Sites in Ngauro are found in the following bomas: Nathalani, Naputo, Nakishot, Tala and Vaka. Vaka is a notorious place; all interviewees referred to it as the site where criminals mine or where illegal activities take place. Only representatives of the Didinga group can go there to mine.15

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There are numerous mining sites in Kapoeta East, including Napopot, Muroamboloyi, Natharic, Nakuasingua, Kailungura (in Katodori payam), Lokuromuro hills (in Natinga payam), and the western hills – Lokormor (5 hours’ journey from Narus).15

In Kapoeta South there are mining sites in three of the seven payams, namely: Longelaya, Pwato and Takaninyang payams. Anak-nak is the best known site. The villages of Anak-nak boma are as follows: Lumongole, Kangatung, Bilinye, Apilinyong, Lokoporonyang and Alabaley. All villages are said to have gold deposits.16

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2.4 Rough estimates of miner numbers and mineral quantities
Frequently interviewees from a variety of backgrounds in mining areas stated that mining is more important or at least as important for people’s livelihood as farming or livestock keeping. Over time and through the subsequent interviews it became clear that artisanal mining is an important means of
earning a livelihood for people in the areas visited. In almost all the interviews communities highlighted the fact that some miners are from outside the payam, from other states and from neighbouring countries (Kenya, Uganda, DRC and Sudan). These foreigners come to the area only if there are interesting deposits. The fact that small foreign companies are active in the area, and that local people are engaged in small-scale mining as well as artisanal mining, shows that gold deposits are seen as presenting a promising business opportunity.

It is difficult to estimate the number of miners, however, because there are no statistics available, people are very suspicious and do not easily offer any information, none of the development actors has so far paid any attention to artisanal mining, and during the rainy season (the mining season) large numbers of miners are active, but few in the dry season. Some miners operate continuously, others only occasionally.

The assessment team asked in all bomas where mining was taking place how many people were involved in mining. The responses varied but it is likely that the number is higher than the 60,000 miners estimated by MPM.17

The quantity of gold extracted per day is also hard to establish because the gold mined is sold to many different traders and dealers and the trade is not subject to any control at all. The amount varies from dry to rainy season, and from person to person. Some people spend a month searching and find nothing, especially in the dry season, while others get 1, 2, 4 or even 10 g a day. Experience and, to some extent, luck, play a big role in finding the gold. More experienced miners in most cases do better than novices. The World Bank estimates the average gold production of an artisanal miner to be 1 g a day.

With an estimated number of at least 60,000 miners and a family size of 5 to 10, the number of people who to some extent benefit (directly and indirectly) from artisanal mining could be more than half a million.

The gold found in all sites is of good quality, and is mostly coarse-grained, meaning that no mercury or cyanide is required for extraction and purification. Some tests show a purity of over 22 carats (91.6 per cent gold) compared with around 18 carats for gold mined in the Central African Republic.18

The number of mining sites and the estimated number of miners and volume of mineral production show that artisanal mining has existed for a long time, yet there are few sources of information on historical mining and it is therefore not possible to know what kind of deposits have been mined and to what extent. The assessment team found no indications that there had been any gold mining before the period of Anglo-Egyptian rule over the then Sudan.

Interviewees in the mining areas all referred to the colonial times and specifically to the 1940s and 1950s as the decades when gold mining started in their areas. “Kapeto (Juba County) and Greater Kapoeta (EES) were the two well-known places for gold in the past.”22

According to various interviewees in Lobonok payam (Juba County) and Wonduruba area stated that mining activities started under the rule of the British administrator Captain C.W. Cook. He paid the people for the gold they mined. The Chief and other elders recalled that a ‘gold factory’ was built and run by the British at Kodobok in the Togolo area, north-east of Wonduruba headquarters. After Sudan gained its independence in 1956 Captain Cook left the area, but the people continued to mine for gold in Capo and Wonduruba, for their own benefit. Artisanal mining continued until sometime in the 1970s when it was stopped by a government order during the rule of President Jaafar Nimeiry (1965–85).23

A number of interviewees and sources indicate that gold mining started in different sites at different times in Kapoeta and Budi counties, either during or immediately after the colonial period. Mining started when labourers from Kenya and Uganda, brought by the British colonial administration and by Greek businessmen, were mining for gold. Local people learned the mining techniques from these labourers. The gold was sold to the British and to dealers. After the British left, Arabs came from the north and bought the gold. Later, southern Sudanese came, bought the gold and transported it to Uganda and Kenya.24 All foreigners left when the Anya Nya I rebellion started. By then the communities knew how to mine, but mining activities declined until the famine in the 1980s.25 Toposa elders at first had refused to allow digging for gold, saying it might lead to hunger, but many people continued digging in secret. When hunger did come, however, searching for gold began in earnest because this was encouraged by Chief Lotikiron.26 The fact that mining activities intensified considerably during the famine of the early 1980s was confirmed by everyone whom the team met.

The community representatives met by the team in Canji payam (Juba County) and Wonduruba area stated that mining activities started under the rule of the British administrator Captain C.W. Cook. He paid the people for the gold they mined. The Chief and other elders recalled that a ‘gold factory’ was built and run by the British at Kodobok in the Togolo area, north-east of Wonduruba headquarters. After Sudan gained its independence in 1956 Captain Cook left the area, but the people continued to mine for gold in Canji and Wonduruba, for their own benefit. Artisanal mining continued until sometime in the 1970s when it was stopped by a government order during the rule of President Jaafar Nimeiry (1965–85).27

Mining during the SPLA war

During the war gold was mined by the Sudan People’s Liberation Movement/Army (SPLM/A), to fund the liberation struggle. An IRIN article confirms this: “Though not well documented, South Sudanese gold has been traded in cross-border markets for...”28
many years. During the civil war, the cross-border gold trade offered a number of advantages to individuals and armed groups in southern Sudan, including the SPLM/A [...] During the war, finds were great; gold was sold to Sudanese traders for as little as US$1 a gram, and was used by Southern rebels to fund their fight against the north.” A number of interviewees stated that during the war there had been a serious resumption of mining in CES, thanks to the SPLA promoting it by various means. According to our interviewees in CES, SPLA systematically used a number of strategies to promote and organise mining (and to obtain their share of the gold), which are described briefly here.

Training and mobilization: The Gorom chief was taken in the early 1980s as a young SPLA fighter to Zaire (today’s DRC), together with other fighters, to learn how to mine gold. On their return they had to train people from different tribes so that they in turn would also train others. According to the chief many people mined in Luri, Togolo, Luweri and Kayata Rivers and sold the gold to the SPLA. In Ganji, an SPLA officer, a native of Kajo-Keji, persuaded the local community to resume mining for gold under the control and protection of the SPLA. In 1993, during the war and because times were very difficult, Chief Noel Laila (Wonduruba) sent people to Togolo to find gold in order to be able to buy food and salt. According to the boma chief in Yapa (Lobonok Payam), mining began there only in the early 1980s, and this was probably at the instigation of the SPLA. The Paya gold mine is located south-east of Yapa and was one of the most important mining sites in the area.

Collection of shares (taxes) and organization of mining by the SPLA: According to the Lobonok payam head chief, the SPLA formed a unit to protect and control the miners. Every month the chief had to collect one bucket of gold from the community and give it to the SPLA. Another system adopted by the SPLA was to get all community members to mine on its behalf for one day per week or per month. The Paya gold mine was operated directly by SPLA. According to several interviewees in Lobonok payam, a tunnel up to 100 metres long and at a depth of 100 metres was dug by the miners. People had to line up in front of the tunnel with torches, mattocks and sacks in their hands. The entrance to the tunnel, which took one person at a time, was controlled. The rock and soil a digger extracted was divided between him and the SPLA. In about 1990 the tunnel partly collapsed, and some miners were killed. The Paya mine was abandoned because the tunnel became filled with water.

In Wonduruba, “each person was to give gold corresponding to the weight of two Indian match sticks per period to the SPLA administration in the area. Additional gold was sold to SPLA.”

One or two people from the villages recounted that the SPLA, or at least some commanders, pushed too hard to get the gold so that people started to resist or find strategies to keep a larger part of the gold for their own survival.

In Kapoeta and Budi counties the situation was somewhat different. As detailed above the people in these counties stepped up their mining activities at the start of the SPLA war but the main reason for this was their need to secure their livelihoods in a time of famine. The SPLA opened up cooperative shops in Kapoeta, Ngauro and Chukudum where gold could be exchanged for basic commodities. This was a different way of promoting mining and of getting possession of the gold; eventually it was also used in order to avoid conflict with Toposa militias. According to historian Douglas Johnson, much of the friction between the Toposa militias and the SPLM/A during the war can be traced to the SPLM/A’s attempt to gain control of the gold fields in Toposa land.

2.6 Exploration and efforts to promote industrial mining

A number of foreign and some national institutions, companies, individual academics and UN organizations carried out some studies on mineral deposits in Sudan and Southern Sudan between the times of independence of the old Sudan up to the creation of the present independent South Sudan. Because of the wars all the initiatives were halted at a certain point. After the signing of the CPA, the Government of South Sudan (GoSS) tried to attract investment from around the world through publicity and making appropriate contacts. “Welcome to South Sudan: The World’s Newest Investment Destination! South Sudan is open for Investors, who are ready to work with the people of South Sudan.”

In 2005 the government established the Ministry of Energy and Mining (now Petroleum and Mining) to regulate the mineral resources sector. Subsequently a number of provisional licences for exploration were issued. According to MPM, 53 applications for licences have been submitted in the past few years, many of them from Australian companies. Most of these companies are rather small, and interested either in small-scale mining or in exploration, and none is capable of running a major mining operation. However, but no big company would come and invest in exploration in a country like South Sudan. They would prefer to wait for smaller, more flexible companies such as Equator Gold to prepare the ground first, and only when large deposits are found will they come in. The majors want large-scale and high-grade projects.

In addition to the provisional licences issued by the Directorate it was formerly a common practice for all kinds of authorities to give out licences or permissions for exploration as well as mining. After the signing of the CPA “foreign and domestic companies, keen to secure favourable terms in an insecure political, social, and economic environment, began to seek mineral licenses with government institutions at various levels. Military institutions and individual military officers began negotiating deals with foreign companies in an effort to develop independent sources of funding, a move that could undermine civilian control of the military by removing military budgets from parliament control. High-level government officials also began to pursue mining deals in contravention of the prohibition against those who hold constitutional posts engaging in private commercial transactions. To halt the unregulated distribution of mining rights and to permit time for the government to establish its regulatory framework, the Southern Sudan Legislative Assembly put in place a moratorium on mining licenses in November 2010.”

Only two companies have proved to be serious about their interest in investing: New Kush (NKEM) and Equator Gold (EG). They were granted what is called a ‘grandfather licence’, giving them the first right on this area. These were eventually...
transformed, in May 2015, after the companies reapplied, into full exploration licences.

After applications were submitted between March and May 2015, full licences were granted at the beginning of June for the four exploration projects in which NKEM and EG are involved: NKEM in Kapoeta; EG in cooperation with CMERIC in the Luri Project; EG with Spear Mining in the Udabi Project; NKEM with EG in Kajo Keji, and EPIC in Mundri, EES and UNS.

In spite of serious efforts on the part of leading members of staff in MPM, international partners still do not pay much attention to mining. Most support so far comes from AusAID which offers technical assistance through Adam Smith International (ASI). According to ASI substantial support has been provided during recent years. With the overall objective of strengthening mineral sector governance and fostering economic development and diversification, ASI/AusAID supported the Government of South Sudan in developing a draft mining law, associated regulations and a fiscal framework for mining. According to MPM, there was some funding also from other sources, such as the Multi-Donor Trust Fund, to draft the mining act. The Chinese government showed some interest in supporting the geological survey and the US government recently made contact but has not promised any concrete support. According to MPM, Cordaid is the first NGO to look into mining-related aspects of development.
3. INSTITUTIONAL AND LEGAL FRAMEWORK FOR MINING

3.1 Acts, policies and regulations
At national level the Ministry of Petroleum and Mining – Directorate of Mineral Development is in charge of all mining related activities. The states also have created their respective institutional structures to regulate, organize and monitor mining activities. In Central Equatoria State it is the Ministry of Commerce, Industry, Mining and Investments – Directorate of Industry and Mining, and in Eastern Equatoria State the Ministry of Finance, Commerce, Investment and Economic Planning – Department of Investment and Mining.

An Investment Promotion Act was drawn up and enacted in 2009. This Act provides investor protection in seven areas including guarantees against expropriation, protection of intellectual property rights, and mechanisms for dispute resolution. An Investment Promotion Act was drawn up and enacted in 2009. This Act provides investor protection in seven areas including guarantees against expropriation, protection of intellectual property rights, and mechanisms for dispute resolution.46

The Mining Policy was approved by the Council of Ministers in January 2013 and advocates national authority over subterranean natural resources, to be managed on behalf of and for the benefit of the people of South Sudan. The Mining Act 2012 was passed by parliament on 19 November 2012 and enacted by the President on 27 December 2012. It endorses the Extractive Industry Transparency Initiative (EITI). The Mining (Mineral Title) Regulations were drafted in 2013 and signed into law in March 2015.

With a moratorium MPM suspended all mining and exploration activities from 2010 until such time as the mining bill and the mining regulations were signed into law. When the Mining Act 2012 was passed, all the previous licences automatically became null and void. Re-application for licences was necessary, but was not possible until 2015 when the Mining (Mineral Title) Regulations were signed. A draft of the mining regulations was made available to civil society by ASI in February 2014. CSOs were invited to provide some input, but little feedback has come from South Sudanese NGOs. Instead, it is international NGOs working in South Sudan, such as UNWOMEN that have given a certain amount of input.

Also forming part of the framework are the Extractive Industries Transparency Initiative (EITI), and the corporate social responsibility (CSR) policies of the various companies involved in the sector.

Other acts and policies of relevance to mining include the Public Financial Management and Accountability Act (2011), the Anti-Corruption Act (2009), the Local Government Act (2009), the Land Act (2009) and Land Policy (2013), and the Human Rights Act (2009).

Despite the adoption of laws and regulations drafted on the basis of international standards, much still needs to be done regarding both the legal framework and implementation, particularly in connection with community-related aspects of mining and the promotion of artisanal mining.

The Mining Act comprises 26 chapters and 198 articles covering: six types of licences; security of tenure; access, use, occupation of and compensation for land; exploration and mining agreements; environment and social provisions; a mining cadastre office; and a mines inspectorate. The Mining (Mineral Title) Regulations 2015 deal with various aspects of mining in greater detail. Application, duration, relinquishment, enlargement, technical aspects and reporting receive substantial attention in the Regulations, whereas community- and environment-related aspects are dealt with more superficially.

Within the range of topics covered by the Act and the Regulations, a number represent areas of interest for the present assessment: purpose; types of mineral titles and a definition of these and some requirements; environmental and social impact; community consultation; compensation and resettlement; community development agreements; gender; CSR and benefits for women and youth; and sharing rents, royalties and taxes. We summarize below the main elements of these topics.

Purpose
The purpose of the Regulations is to regulate mineral titles as provided for under the Act. The purpose of the Mining Act is more elaborate and refers explicitly to sustainable development, highlighting specific ambitious principles: mining activities must not harm the environment; government and industry have to work in such a way that the economy is developed and the environment preserved for the benefit of present and future generations; the responsibility for a sound and healthy environment and the development of a sound and healthy mining industry is shared by government and industry, working with local communities; honest stakeholder engagement is strongly encouraged.

3.2 Types of mineral titles – definition and some requirements47
There are different types of titles: Reconnaissance, Exploration, Small-scale Mining, Small-scale Mining Licence for State Natural Resources (quarry minerals), Large-scale Mining, Retention, and Artisanal Mining. The regulations regarding duration, area and extension differ according to the type of title.

In order to attract investors the Mining Act contains incentives. According to the CEO of Equator Gold the duration of exploration licences is quite long, at 15 years (covering three terms of 5 years) and, at 2,500 km², the area under licence is also quite big. In other countries, for example, Tanzania, the duration is only 7 years and the area a maximum of 200 km².49

The Mining Act 2012 assigns to the states responsibility for legislation on artisanal mining as well as small-scale mining for individual states’ natural resources.50 To date, MPM has not seen any legislation passed by a state government, but has
received requests for help in drawing it. A number of general provisions in the Mining Act provide the states with orientation in this regard.

**Artisanal mining**
The Act recognizes the traditional rights to pan minerals from the surface, streams, rivers and other areas. Only surface minerals are allowed to be mined artisanally. “Surface Minerals” means Minerals that occur on or close to the surface of the earth that are recoverable using Artisanal Mining methods but do not include any Minerals occurring more than 10 metres below the surface, whose recovery requires the use of explosives....”

Artisanal miners are only allowed to use traditional or customary ways and means. No explosives, no hazardous chemicals and no mining equipment (metal detectors, trucks, crushers, etc.) are permitted. The relevant state authorities are responsible for granting artisanal mining licences, and these are to be issued only to South Sudanese citizens. No artisanal mining licence may authorize the exploitation of more than 12,000 cubic metres of raw ore in any calendar year.

These provisions are limitations that can be respected and enforced. However, the Act does contain some requirements and provisions – for example, in sections 75 and 78 – that are disconnected from the reality of the artisanal miners whom the team met in the mining sites. For example, according to Section 75, applicants must submit applications in a prescribed format, with maps, coordinates and many other details. The applicant has to submit an Environmental Impact Assessment drawn up by an experienced expert as well as a mine closure plan. All this cannot be expected from the miners whom the team met. The last provision in this section gives the state the possibility of exempting the applicant from this requirement. Our interviewees at state level were not clear how this possibility of exemption would be handled in future. Exemptions regarding obligations described in Section 78 (Applicants’ Rights and Obligations, subsections 2 and 3) seemingly cannot be granted but are just as difficult for artisanal miners to meet. For example, maintaining full and accurate books and records, which must be available at any time for inspection. An annual report has to be submitted including details of complex aspects such as the accounts for the calendar year and an evaluation of environmental impacts.

The licences for artisanal mining are to be issued by the relevant state authorities. The CES Directorate has drafted a ‘CES Mines and Quarries Act 2014’. This is still at the consultation stage but was expected to be approved before the end of 2015. The states have not yet drawn up artisanal mining regulations that could simplify the various requirements and exempt the applicant from having to go through the bureaucratic procedure. The artisanal mining licences seen by the assessment team (Woke Cooperative and Great Ramciel) are not appropriate for an artisanal miner. They are too expensive and include clauses an artisanal miner could not comply with.

**Small-scale mining**
Small-scale mining licences for state natural resources are granted by the relevant state authorities and can be obtained by an individual, a community, cooperative or a company. The resources are basically quarry minerals and do not include mineral resources such as gold. Licences for small-scale mining of gold and other high-value mineral resources are granted by MPM. Clear limits are set for small-scale mining with regard to output and technologies used, and are described in Section 60 of the Mining Act. Other provisions in the Act relating to small-scale mining aim to ensure that a licensee starts production no later than the date approved in the programme and maintains continuous commercial production, maintains the safety standards pertaining to the specific licence area and mining operations, and complies with all requirements for assessments, plans or programmes for the protection of the environment. There are no provisions regarding community consultations.

**Large-scale mining (Section 62)**
Large-scale mining licences are granted by MPM. A title holder of one of these licences must be a company, duly incorporated or registered as a company under the Companies Act 2012 or its successor legislation, which has the technical competence and financial ability to fulfil the licence obligations. Other provisions in the Act aim to ensure that a licensee starts operations as soon as possible, maintains operations and uses only an area reasonably necessary to carry out the mining operations. There are provisions for safety and environmental protection but none on community consultations. Section 68 makes a community development agreement an obligation for all large-scale mine operations.

**Environmental and social impact**
A number of provisions and requirements in different sections of the Mining Act 2012, and in the Mining Regulations, are concerned with environment, health and safety.

Section 121 / 2: “In accordance with good international mining industry standards, the applicant for a Mining Licence or Retention Licence or any renewal of either shall prepare and submit a comprehensive Environmental and Social Impact Assessment as part of the business plan as required under Section 63(8) or, for an Exploration and Mining Agreement, as per Section 102.”

In the Regulations, Sections 17 (exploration) and 31 (small-scale mining), the applicant is obliged to submit together with the application form “the details of any significant adverse effects that carrying out the Exploration Programme will likely have on the environment, gender impact and on any monument, cultural heritage, artefact or relic in the proposed Exploration Area, measures to be taken to mitigate such effects and an estimate of the cost of mitigating such impacts”.

The focus of the regulatory framework is on the environment and health, and less on social impact.

**Community consultation**
Section 52 (g) of the Act describing the obligations of a title-holder of an exploration licence states that a title-holder shall inform and consult, on an ongoing basis, with local government, traditional authorities and communities about those exploration operations that require physical entry on to the land within their respective jurisdictions. Nevertheless, community consultation is not clearly specified as a definite requirement for small- and large-scale mining title-holders.
In Section 58 of the Regulations there is no mention of consultation but only a requirement to provide the relevant community with information.

Compensation and resettlement

Neither the Act nor the Regulations are sufficiently detailed and clear on this important aspect. Section 90 of the Act states: “Mining Operations authorised by Small-Scale Mining Licence or Large-Scale Mining Licence do not constitute a land use for the purposes, objectives, rents, fees and requirements of the Land Law.” Holders of exploration (Section 52), small- (61) and large-scale (67) mining licences are obliged to compensate users of land for damage to land and property resulting from mining operations. Section 59, describing an ‘Access Order’, states that the order may include “(f) the compensation, if any, to be paid to the User of Land by the Title Holder as a consequence of any sure and measurable monetary loss or interference with the User of Land’s right to use the land that may be reasonably attributed to the Title Holder’s operations.” Section 60 of the Regulations, concerning compensation for disturbance of land, stipulates that compensation must be paid to the land owner for any damages.56 In Section 143 of the Act it is stated that fair and reasonable compensation must be paid, as required by the current Land Act, but no further details are given.

From these few quotes it becomes obvious that provisions for compensation are insufficient and need to be clarified and set out in greater detail, although feedback from ASI and MPM suggests it is intended that all compensation matters be negotiated within the framework of a community development agreement, which is compulsory for all large-scale mining projects.

Section 61 of the Regulations contains some references to resettlement. It states that resettlement is to be a last resort, and that if it becomes necessary, an action plan for resettlement has to be drawn up by the company after public consultation with the communities. Resettlement is a complex and difficult undertaking, yet there is hardly anything in the Regulations that could offer useful orientation to the stakeholders.37

Community development agreements

A community development agreement (CDA) is an agreement negotiated between the communities and a company. The agreement should address all problems affecting communities that arise from the company’s operations as well as broader development objectives for the area of operation and beyond. The outcome of the negotiations is formalized in a written document, which in South Sudan takes a legal form with mutual obligations between communities and companies. The agreement has to be negotiated in cooperation with the government (see Act, Section 68). There are examples of CDAs in other countries, but so far no CDA has been negotiated in South Sudan.

According to the Regulations and the Act a CDA is an obligation for large-scale mining operations, although not for exploration or for small-scale mining. Large-scale mining operations may even be suspended due to substantial non-compliance with the requirements of a CDA. Requirements concerning a CDA linked to large-scale mining operations are set out in Section 68 of the Act, Section 56 of the Regulations58 and in a separate set of Community Development Regulations. The CDA regulations were to be debated in parliament in July 2015 and were not yet publicly available.

There is also some reference in the Regulations to CDAs and benefits in general in connection with exploration and small-scale mining. Section 17, specifying the form of application required for an exploration licence, states that “any Community Development Agreement, if any or agreed upon community activities or local procurement commitments” can be annexed to the application, but this is not a requirement.

A CDA has to be negotiated once a large-scale mining licence has been obtained. During exploration, too, companies are encouraged to contribute to community development. According to Section 28 (d) on exploration, the company should submit a report giving substantial details of its community development, local procurement and public information activities including identification of any related issues or problems that may have arisen and how they have been addressed, or what interventions from government are requested to ensure that ongoing operations and benefits remain in place.59 Section 37 (q), with reference to small-scale mining, states that a report on how the mining activities are benefiting women and youth should be prepared; it’s to be made available in particular to women’s and youth organizations but also to the general public.60

Gender, corporate social responsibility, and benefits for women and youth

There are specific provisions in Sections 55 and 57 of the Regulations concerning the obligation to provide a gender-responsive CSR programme. Title-holders are also required to report annually on how their activities are benefiting women and youth.

Section 55 (g) of the Regulations calls for a separate set of regulations on CSR, but according to MPM in July 2015, these specific regulations had not yet been drafted.

Sharing rents, royalties and taxes

A Fiscal Regime is being developed in order that the Ministry of Finance and Economic Planning can be advised on issues of mining taxation. The Fiscal Regime is to cover the following issues: royalties, calculated as a percentage of the gross market value and published as a schedule; fees, published as a schedule; annual rentals per sq km, published as a schedule.61

Any rent, royalties, bonuses or other moneys, except fees, paid to the national and state governments as a result of exploration and mining activities, are to be shared as follows:

In the case of mining activities governed by the national government, 5% of these revenues are to be paid to the states and communities (2% to the state and 3% to the communities). In the case of mining activities governed by a state government (artisanal mining and small-scale mining of quarry minerals), 5% of the revenues are to be paid to the counties and communities (2% to the counties and 3% to the communities).
4. MAIN FINDINGS ON ARTISANAL MINING

4.1 The miners and their motivation for mining
The majority of miners in all mining sites come from the respective boma or payam where the mining site is located, but some also come from other states in South Sudan, from different ethnic groups, and from neighbouring countries, specifically from Kenya, Sudan, Uganda and DRC. The miners from neighbouring countries are highly skilled in mining and sometimes bring with them modern equipment such as metal detectors.

In all sites women and children mine, not just men. It seems that in CES, however, there are more men, and specifically young men, doing the mining, whereas in Kapoeta, specifically in Toposa areas, according to various interviewees, more women than men are found in the mining sites.

In most areas, interviewees described mining as a very important activity to complement farming (CES) or cattle rearing (Toposa communities). Mining generates the cash needed for a number of basic needs such as health care, clothing and school fees. Young people whom we met in various sites claimed that they earned their living exclusively from gold mining.

4.2 Technologies used for artisanal mining

Water and traditional tools
Miners are tenacious and enterprising, but gold is mined with very simple tools and seldom at depths greater than 10 metres.

Pure gold nuggets and larger grains of gold can be found in Greater Kapoeta, throughout the year. However, for panning for gold dust and tiny grains the miners need water, which is why the majority of people mine during the rainy season, from May to October, when water is available in the streams.

Miners in all sites basically use traditional tools such as mattocks, hoes, hammers, cutlasses, shovels, metal bars of various lengths and thicknesses and buckets, to crush and collect the sand, gravel and rock that they believe may contain gold. Miners get the sands and soil from the river beds and river banks; some also dig deeper into the rock.

The sand and rock is washed directly in the streams when water is available. In Gorom the miners had dug pits 1 m deep, 2 m long by 3 m wide, placed a plastic sheet inside and had the pits filled from water trucks from Juba. Similar solutions are used in Vaka and Bolo, near Ngauro (Budi County). There the miners dam streams and create ponds. They pay people to bring water from the river to fill their ponds.

Even tiny particles can be obtained through panning. Wide plastic and aluminium basins are used to pan the sands and hand-crushed rock with water to separate out the gold. During the panning, at some point any gold will be reflected at the bottom of the container, the miner can then retrieve it.

In Anak-nak miners told the team that small specks mixed with impurities like dark minerals and flakes are dried and then the miners blow gently over it to remove the unwanted impurities, leaving behind pure gold.

According to miners met in Wonduruba some innovative people have designed a simple method to wash gold. With sticks, they create ridges, lay blankets on them and on these they wash the gold containing soil, or sand and gravel. As the water flows down over the ridges, gold is trapped in the wet blankets.

In Ngauro the communities told the team that, over the years, local miners had developed expertise in mining. Some people can detect gold or interesting mining sites from observing the soil type, the rocks on the surface and other indicators.

Metal detectors
Some miners use metal detectors to search for gold. In Kapoeta this was confirmed by communities and authorities that the team met, and by the mining company New Kush, but also through photographs and articles on the internet. A photo taken in 2012 in Anak-nak shows a Kenyan with a metal detector. New Kush staff reported that in Kapoeta in 2014 they
were offered a detector for SSP 45,000 SSP (USD 7,500). Metal detectors are available and used in all sites visited in CES, where the people refer to the miners with detectors as ‘Darfurians’. They are also available and used in EES, even though in this state they have been banned since 2012. The use of metal detectors is in fact prohibited by the Mining Act, but seemingly they continued to be used secretly. According to several interviewees some members of elite groups from Greater Kapoeta are involved in mining and have given metal detectors to local miners in order to increase production. The community members met by the assessment team estimated that the number of people using metal detectors could be up to 200 at the various sites in Anak-nak, while the number of miners digging without metal detectors might reach 2,000-4,000 when a new gold-rich deposit is struck.64

A lot of the mined gold is in the form of dust or very fine gravel, and for this kind the metal detectors are not appropriate. Miners using metal detectors do not do extensive panning; instead they search for nuggets. New Kush has heard of miners with detectors having found a nugget as big as 200 grams. Support to artisanal miners
The assessment team did not come across any initiative providing technical or financial support to artisanal miners. No NGO, international development actor or government service seems to have even begun to give some thought to this challenge.

4.3 Local organization and regulations concerning artisanal mining
Organization and local regulations are diverse in nature but quite rudimentary. Regulations set by the chiefs and landlords in the communities are mostly very flexible and do not entail any real restrictions. A common organizational feature in CES seems to be the ritual carried out by the landlords and chiefs at the beginning of the mining season. Before any mining starts every year a goat has to be slaughtered by the landlord in order to ‘cleanse’ the area and ward off accidents or other problems.

Information and ‘registration’
It also appears that in all areas there is an obligation to inform the chiefs and landlords of the intention to mine. Specifically, foreigners are in principle not allowed to go and start mining without having made themselves known to these traditional authorities. There are no formal restrictions, however; anyone can come and mine as long as they respect the local culture. Nevertheless, the Gorom chief told the assessment team that if anyone not known to him was found in the mining area to mine or to buy gold he would have that person arrested.74 Miners know this and report to the chief when they see any unknown person arrive in the area. If a trader arrives, the chief sends someone to accompany him to the site.

In Karpeto (Lobonok payam, Juba County) miners have to obtain a mining permission in the form of a written letter from the payam head chief, and pay fees to the local development organization KADO.76

In Wonduruba the payam administration tried to register gold miners in the area in order to be able to collect taxes from them. The payam administrator summoned them to report for registration but it seems that few turned up. More recently he again ordered miners to register and to indicate where they wanted to mine, but explained that the reason for this requirement was that there was persistent insecurity in the area. This time more miners complied with the order.

Division of labour
Men, women and children mine gold. Only in very few cases is there a division of labour; for example, in the case of a family, where the husband digs the hole and the wife and children carry the dug-up soil for panning in a stream. Miners work as families, as individuals or in groups. Some mining sites are close to the villages, as in the case of Ganji, Bungu or Wonduruba payams, and people mine every day, after working on their farms, from noon until the evening. In places where the mining sites are quite far away, the miners go there and stay for a week or until they have found enough gold. They stay in camps, where the shelters are temporary and of poor quality. People take with them provisions such as oil, flour, beans and cassava, and cook on the sites.

Quartz veins and hard rock mining
Communities in Wonduruba, Ganji and Lobonok all knew of at least one place in their respective areas where artisanal miners had followed gold-bearing quartz veins into the rock, but today all these places are abandoned. In Budi and Kapoeta this type of mining more frequent than in the mining sites of CES. Even with traditional tools, miners in the sites of Ngauro and also in Greater Kapoeta are able to dig deep tunnels. They dig holes up to 10 m deep and then excavate adits (tunnels) in different directions, leaving portions of the rock to stand like pillars to support the overlying soil.65 The miners build steps to climb down the hole and search for the descending gold-bearing quartz veins.66 When carrying out exploration in Anak-nak, New Kush employees have seen that the miners have dug tunnels at depths of 14 m.67 A photo of an adit can be found on the NKEM website.68
Ownership
In most areas visited in CES and EES there is a type of collective ownership of the gold mining sites. If a person finds gold in an area others will also come and try their luck. Mining takes place in a random fashion, and the sites are not divided into plots. Land is communally owned, so in most places visited no one was claiming ownership of a mining site.

In the Toposa areas (Kapota), however, the assessment team saw a mine ‘owned’ by a 13-year-old boy who said that when he discovered gold at a particular spot, he employed other people to dig for him. When the mining is organized in this way, the digger excavates certain quantity of soil, of which a percentage is given to the ‘owner’. The miners in Ngauro payam (Budi County) work for themselves or in tiny groups of friends. Each individual digs his own hole. "If a miner digs a lot of gold-bearing earth or sand he may hire others to carry it for him to a water point. He may also hire 5–6 people to pan the carried rocks/sands/earth with him. If a miner has found a productive hole he must remain at site to guard his discovery and to prevent thieves to sneak into the hole and dig gold for themselves."77

Self-organization for development
In Lobonok payam the Karpeto Development Organisation (KADO) tries to organize mining activities and to create benefits for the communities through mining, and for his purpose has put in place regulations and structures for registration, taxation and development activities.

When the community in Ganji were asked whether they had considered founding a cooperative society to organize mining activities, improve marketing and get better prices, the response was no, because they had had bad experiences in the past with an agricultural cooperative society. Funds had been misused by some members, and this had led to a lack of trust in the concept, so there was no desire to set up a cooperative for gold-mining activities.

In Kapoeta and Budi counties there is nothing comparable to the Karpeto Development Organisation for local mining activities.

Security
In Ngauro (Budi) mining sites, anyone who wants to mine needs to be accepted by the network that controls specific sites such as Vaka.

In Kapoeta counties people choose freely where to mine and there is no rivalry on sites and no local regulations controlling mining activities. However, there is great respect for the chiefs, who therefore readily intervene in any disputes or other problems. In Pwato payam (Kapota South) most of the miners are Toposas. “Gold is like cattle; you have much of it, you have enemies.” Boma chiefs are present at the mining sites and settle any disputes on the spot, but if a major problem arises, the payam chief is called to the site to resolve the issue.79
**Karpeto Development Organisation (KADO)**

KADO was founded by people born in Karpeto boma, before it was divided into three bomas – Karpeto, Kaleng and Kit 1. Its objective is to contribute to the development of the local community by providing support for education (building schools), the improvement of health services (constructing Health Units), the improvement of agriculture, HIV/AIDS sensitization and youth empowerment. KADO coordinates activities, links the communities up with development NGOs and conducts awareness-raising activities.

KADO has about 300 active members. The General Assembly meets to discuss important topics or to deliberate on intended activities and projects. It has an Executive Board composed of 12 members (4 from each boma). The Executive Board includes experts in different fields (agriculture, health, education, etc.). KADO’s Central Committee is based in Juba, and there are branches in all bomas. At boma level, the committees are composed of 6 members.

In order to raise funds for development projects KADO has introduced a system of levying a local tax on mining. At present this tax (in the form of a ‘token’ to be paid each time a specific mining area is entered) stands at 10 SSP for all native miners and 20 SSP for non-native miners and gold dealers or buyers. The tax is a little higher for miners using metal detectors. According to the chairperson the system for collecting the taxes is not yet very efficient, and many miners avoid paying. Some are even armed and threaten the committees. The Executive Board has asked the payam director to provide security, but the payam police and payam administrators have no means of transport.

The assessment team did not come across any self-organized security system in CES, although a number of interviewees said that incidents did sometimes take place. For example, quarrels can break out when people get drunk in the camps. In the Karpeto sites conflicts arise when miners resist paying the taxes. Some are even armed and threaten the committees. The Executive Board has asked the payam director to provide security, but the payam police and payam administrators have no means of transport.

**Taxation/licensing**

Although the SPLA systematically took taxes from the miners or made communities mine for the liberation struggle, the government at present does not levy any taxes. With the signing of the CPA taxation of mining ceased completely.

In Gorom and in Karpeto the team encountered a system of local taxation that seemed quite appropriate. The chief systematically collects taxes from all miners, who have to give 1 gram of gold per month, whether or not they have found any gold. The rate of 1 gram was fixed on the basis of the amount of gold that, experience suggested, people were generally able to collect. After consideration was also given to the fact that people have to earn a living through the gold mining and that it is very hard work, it was concluded that 1 gram was an appropriate monthly tax. The collected gold has been used to construct a simple school building, the Episcopal Church of Sudan church and the Catholic church.

KADO was founded as a tool for development. It took time to explain its importance to the communities, and to make them understand the reason for collecting taxes. It was also difficult to create the degree of transparency that would satisfy the communities. The boma committees collect the taxes, and KADO has produced receipts for them to give to the miners when the taxes are paid. Some miners pay in cash, others in gold. When gold is given the local branch takes it to Juba where KADO sells it. It has opened a bank account in Juba for depositing the tax money. The Executive Board regularly keeps the communities informed of these transactions, and when tax revenue is to be spent, the Board invites representatives from the local branches in Karpeto to come to Juba to decide on what needs to be purchased. For example, when the school was being built the Board, together with representatives of the boma committees, sold the gold and with the proceeds bought iron sheets, cement and windows.

With the funds collected KADO has been able to implement three projects, starting with construction of the Primary Health Care Unit. Then KADO contributed to the construction of the primary school. The school’s foundation was laid in 2006 and in 2010 one building was erected with CDF funds. Now there are two other buildings with three classrooms each which KADO has helped to build. When the Vice-President of South Sudan saw that KADO was a serious organization he also contributed some support. The two school buildings are in use but not yet completed. KADO’s third project was the purchase of a motorbike for the Chief of Kit 1.

As described above the development organisation KADO taxes gold miners in Karpeto in order to raise funds for development projects. There are many other development organizations at county or payam level in South Sudan, but KADO seems to be the only one that has looked into mining as a source of funds for development.

No taxes are taken from the miners by the chief or any other structure in Yapa which is just next to Karpeto. The chief expressed sympathy with the miners who do a very hard job and earn very little and he said he felt it would not be fair to tax them. Yapa has a boma development committee, but the contributions given by the households are earned through farming.

In Wonduruba the payam administration has failed to persuade miners to pay taxes.

In Kapoeta County authorities and chiefs deny collecting anything from the gold miners. The chiefs in Narus stated that they did not tax the miners, because they earn very little money to support their families. “Toposa won’t accept taxing except if you’ll build a water point for their cattle. When they can see a direct benefit of paying taxes they may agree.” When the idea of setting up an organization like KADO, which eventually enabled a school...
and a health centre to be built, was proposed to the community in Anak-nak (Kapoeta), the miners said: “This doesn’t work with them. It’s the duty of the government to bring schools, health centres, roads.”

People in most sites do not feel comfortable with the idea of giving the government a share. The argument is: since there is little or no service delivery from the government there is also no reason to pay taxes to the government. Some suggested, “if the government gives us better tools we can give some small tax. Also, we cannot accept to be registered. But if government wants to buy our gold with more money we shall accept.”

With the Mining Regulations now in force, this situation will change. But with regard to artisanal mining, the authorities have no idea of how to organize a licensing or taxation procedure with the actual miners, who are illiterate, very poor with few other opportunities. In any case, all artisanal mining has become an illegal activity with the Mining Act and Regulations in place. “The problem is: when you stop it, it can cause you a problem because the local people consider it as their second cow [i.e. a very important source of income]. The governor of EES had once issued a decree for the artisanal miners to be licensed. This attracted people with machines to mine in the Toposa areas. Later the decree was revoked, and the detectors even banned, because it was difficult to control or tax these miners.”

The deputy director of the EES State Revenue Authority said it would need the deployment of security forces in the mining areas to effectively collect taxes from the artisanal miners. So far the government in EES only tries to license foreign companies. Licences are being issued from the state government in Torit for the gold mines of Kapoeta. The payam administrator and director know that local miners never have been taxed so there is a need to proceed slowly and ensure that they understand what the taxes are for.

### 4.4 Gold trade

**Traders, dealers and transactions**

The majority of gold traders, at least in CES, are general traders who also trade in gold, although there are also businessmen who deal exclusively in gold. In CES the gold miners sell their gold mostly to South Sudanese gold dealers or general traders. Some of the traders are actually from the payams where the gold is mined. Traders from other countries, mostly Ugandans, but also Sudanese and Kenyans, also come to the mining sites or markets in mining areas.

Most of the traders who buy gold, trade in other goods which they bring from Uganda to sell in South Sudan. These traders are registered and known as general traders, and not specifically as gold dealers. The licences for general trade can be obtained from the authorities in Lainya or Yei, and also allow the export of gold. According to the traders whom the team met, as registered and licensed traders they are able to pass through Customs and cross the border between South Sudan and Uganda.
Gold is of high value and there is always the risk of theft, so when the miners in CES sell their gold they make sure they get a token – a receipt – in return for it. The token can later be exchanged for cash or goods from the purchasing trader.

In Gorom (very close to Juba), the dealers who buy the gold are of various nationalities, including Indians, Ugandans and Kenyans whose businesses are based in Juba. These foreigners are not allowed to buy on site in Gorom. Instead, there are South Sudanese agents or traders who come on site and buy the gold, then take it to their bosses, or else sell it to the dealers in Juba.

In Kapoeta town, Narus and Ngauro there are general traders similar to those in CES but also dealers who exclusively trade in gold. The team, together with the chief of Ngauro, visited the Ngauro business centre, where a Kenyan Somali gold dealer’s little shop is located. Artisanal gold miners come to his shop to sell gold and buy goods. The gold he buys here, he then sells in Kapoeta. He also sends local people to the mining sites to buy gold. Foreigners are afraid to go to the sites because of gun attacks in the past. "The price for one gram of gold at the mining sites is 240 SSP (40 USD) and in the town it is 320 SSP (53 USD). It is very easy to sell then in Kapoeta. There are always buyers but the transactions are made in secret. I need a minimum 20 SSP of benefice per gram but it is mostly more with gold sold between 370 and 390 SSP in Kapoeta." Kenyan, Somali, Dinka, Fur and Nuer traders come to Kapoeta and buy gold in the area. The chiefs in Narus, Kapoeta East said that currently some white people are also coming to buy gold. Gold dealers send people to the mining sites or miners bring gold to Narus to sell; but all gold is sold secretly.

The miners said they had no idea whether the foreign dealers were licensed. "For us we see that the government has allowed them to come to our area, so how can we stop them from coming to our area. It’s the government that allowed them to enter the country, not us." The miners explained that the government had opened three buying points in Kapoeta but all had failed to work because the government wanted to tax the miners.

One Western mining analyst even alleges that Somali pirates send associates to buy gold as a means of laundering potentially marked dollar bills obtained as ransom payments, because pure gold is more easily smuggled out and sold in Dubai. There are also reports of gold mined in Southern Kordofan reaching South Sudan and then being exported from Juba by road or even by air. According to various sources the illegal dealers manage to get fake exportation certificates. These certificates are needed in Uganda in order to sell the gold.

The general traders described above work in something of a ‘grey’ area from a legal point of view. Those who deal exclusively in gold, however, are either engaged in smuggling or conducting illegal business with the ‘consent’ of local authorities and customs officials.

Dealers need a licence from the national-level authorities; no dealer’s licence can be issued by the states. The Minerals Dealers Regulations are separate from the Mining Regulations and were signed earlier in 2014. Since beginning of 2015 it has been possible for gold dealers to be issued with a licence. By June 2015 only one dealer, from Pibor, had been granted an official licence.

It seems that other authorities at state level have also given out licences. According to the Budi County Commissioner, gold dealers can obtain a kind of licence from the state government, for a fee of 1,875 SSP (312 USD).

Various companies have seemingly made attempts to get into the gold trade, but it is almost impossible to get any hard facts because none of the companies appears to have been granted an official dealer’s licence from the national Ministry of Petroleum and Mining.

**Weighing gold**

It is important to have a system to determine the weight of gold that is trusted by miners and traders. The current system was developed over time, and local people we met could not recall when it was introduced, but all said it was a long time ago.

In Lobonok Payam a locally made weighing machine was observed. It consists of two tiny scale pans which hang from a small, pen-size horizontal stick. This horizontal stick is held between first finger and thumb to suspend the pans while gold is weighed. A small quantity of gold rolled up in a piece of polythene bag is dropped into one of the pans. Then a weight (razor blade) is dropped into the other pan. One 1 razor blade is equivalent to 1 gram; half a razor blade, half a gram. For weights over one gram, coins are used. When the two pans are in balance, the machine owner and the buyer bargain over the price.

The scales used in Ganji and Wonduruba consists of two pans, suspended from either end of a small bar by three chains each. The bar is connected to a ring which the trader can hold. The trader and seller look at the scale and agree when it looks even before placing the gold and the weights on the pans. The weights used with this weighing machine are Indian matches for measuring less than half a gram, and different types of coins for half a gram up to 7 grams.

In Kapoeta some dealers use digital scales. A trader in Ngauro showed the team what he called a ‘digital computer’ – a small, palm-sized digital scale on which he demonstrated gold weighing. But according to several sources even in Kapoeta and Budi counties, most of the dealers and traders use the handmade scales and the same type of coins and matches. A picture of a traditional scale, different from the ones used in Ganji and Lobonok but also using coins can be seen in the picture gallery of NKEM’s website.

**Gold prices**

The prices vary from site to site and payam to payam. Prices between 150 SSP (25 USD) and 380 SSP (63 USD) have been paid in recent months. In Greater Kapoeta the price is substantially higher than that in CES. Money laundering and other transactions used for procuring gold as a hard currency explains why the gold price stays high in Greater Kapoeta. Artisanal miners get acceptable prices but are mostly paid for their gold in South Sudanese Pounds. The dealers and traders buying gold do better, in that they can easily change the gold into hard currency.
4.5 Benefits for miners and communities

Mining is a key source of livelihood

All communities make it clear that mining is of great importance and has helped to improve their standard of living. Gold mining allows people to earn cash. It is easier and quicker to earn cash with gold mining than with farming or cattle rearing. It takes a long time for a farmer to grow, harvest and then sell his or her crops. Agricultural products are subject to price fluctuations, so the amount the farmer will get is unpredictable. In Kapoeta a cow sold in the market in May 2015 might fetch 1,500–2,000 SSP (250–330 USD). This shows how attractive mining is, because this amount can be earned in less than a week through mining.

For most families we met, mining is a complementary activity. Income from mining is specifically used for needs which have to be paid for in cash, such as school fees, health care and dowries, as well as clothing, batteries and other household items. The miners do not always sell their gold in South Sudan but sometimes send or take it to Uganda. In Kapoeta a cow sold in the market in May 2015 might fetch 1,500–2,000 SSP (250–330 USD). This shows how attractive mining is, because this amount can be earned in less than a week through mining.

For the general traders who import and sell goods in South Sudan the gold is a convenient ‘currency’ because, unlike South Sudanese pounds, it can be easily converted into US dollars, or Kenyan or Ugandan shillings. It is therefore understandable why general traders are keen to get into gold trading.

Artisanal mining as a source of funds for development

As explained above, there are only two places where taxation has been used to channel a share of revenue from mined gold into community development. This type of scheme could be introduced in other gold-mining areas.

4.6 Negative impact of artisanal mining

Social impact and impact on livelihoods

Mining sites are risky places; miners can get sick or HIV-infected, or be robbed, or abuse alcohol. As the head of the Karpeto PHCU puts it, “People mine because there is hunger. They mine and secure survival. But the gold is also practical to pay school fees. Budi County borders Kenya and Uganda. Many children study in these two countries. With the gold the families can get dollars to pay their fees. Gold is a way to cope with the actual deteriorating exchange rate. People go with small quantity of gold, sell in Uganda or Kenya and pay their school fees. That is why mining is so important for many families.”

There were some interviewees in Karpeto and in Ganji who insisted that, in fact, the main activity is gold mining and farming is the complementary activity. Some, specifically young men in Wonduruba and Lobonok, say that they live exclusively from mining and also buy food with the money earned.

With an average gold price of 200 SSP (33 USD) per gram, with production of 1–2 grams a day and 150 days of mining a year, a miner can potentially earn some 30,000–60,000 SSP (5,000–10,000 USD) a year. That is quite a considerable income, in a country where according to UNICEF, “more than 90 per cent of South Sudanese live on less than a dollar a day, and 18 per cent of the population suffers from chronic hunger.”

There are seemingly few cases of a miner really getting rich, although the office manager of Budi County Commissioner recalls that in 2013 a Kenyan found a gold nugget as big as a jug – solid, pure gold. Other interviewees said also that from time to time miners find large nuggets, yet no information was available showing that anyone’s living standards had substantially improved through these discoveries. The town clerk stated that gold has been mined in Anak-nak since the 1980s but no improvements in people’s lives are discernible. There is no building that could be attributed to the money generated by artisanal gold mining, according to the Pwato payam director.

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4.7 Artisanal mining as a source of funds for development

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Impact on farming and food security: “Farming is negatively impacted because instead of preparing the fields at the beginning of the rainy season many are out in the mining site.” A number of people...
have abandoned farming in Karpeto, Wonduruba and Ngauro and rely almost exclusively on mining and casual work. Others spend too much time in the mining sites, neglect their farms and consequently have little to harvest. This leads to food insecurity which affects children the most. “There is only little farming in Karpeto. Before the people fled in Uganda during the war people farmed the land and also dug for gold. Now families depend mostly on gold mining. If gold mining would be complementary to farming it would be of help, but because many families depend only on gold and this is not good. People are ‘money hungry’. Besides they mismanage the little money earned from gold mining.”

The community development officer in Kapoeta South thinks that mining has affected food production because many people now concentrate on artisanal mining. The Toposa are traditionally pastoralists and used to just grow a few crops for family consumption. Now that they have a quick alternative for getting money for buying food, it is likely that they will abandon cultivating crops.

Alcohol abuse and quarrels: Interviewees from all payams and bomas we visited highlighted the fact that people are now drinking far more alcohol because more cash money is available and because alcoholic drinks are often offered on sites and in trading places. The businessmen take alcoholic drinks to the mining sites and nearby business centres, and they barter with the gold miners, exchanging alcohol for gold. The youth in particular in many sites and places drink too much alcohol and this leads to quarrels and to violence.

Kapoeta Commissioner Martin Lorika says levels of alcoholism are high: “The booze is brought by women from the town every day, and causes more mayhem than merriment. They quarrel and fight sometimes. Sometimes they dance. Sometimes there are small arms.”

One effect on culture and custom, as experienced in Budi County, is that the youth have lost their respect for elders and no longer listen to them, as a result of drinking alcohol that they buy out of their income from gold mining.

Unwise use of gold money: There are frequent cases of miners not using the revenues generated through gold mining in a sustainable and wise manner. Money is just spent without proper reflection, so many people remain in poverty despite the considerable amounts of money they have earned from mining. The payam administrator in Wonduruba described a case of someone who discovered an important quantity of gold and then bought 10 crates of beer to get drunk with friends. Others marry three or four wives but over time become unable to maintain the wives and their children.

Negative impact on children: Children help their families in mining as they do in farming. This support becomes a problem when the sites are in remote places, because this means they are prevented from going to school. There are numerous stories of young people dropping out of school to start mining because they are attracted by the ‘easy money’. In Ngauro there is a school with 12 classes but, “There are only few pupils who attend classes – most children are in the gold mining sites.”

The payam administrator in Wonduruba is aware of the high number of children engaged in mining, because the administration now requires that miners must all be registered. Because of the current insecurity, miners must register and also indicate where they intend to mine. Many women and children (aged 11–14) had registered in the weeks preceding the team’s visit (February/March 2015).

Divorce and prostitution: The chief of Kit 1 says he knows of women who left their husbands to go in for mining, and frequently husbands who go mining stay for long periods, neglecting their families; this often leads to divorce, and also to prostitution.

Other interviewees confirmed that prostitution is a fact. Some girls even from Uganda to get gold in exchange for sex with young men. Mostly the prostitutes come from outside but it is not excluded that some local girls also are tempted by the chance to earn quick money through sex work.

Disputes and mistrust: There are dispute regarding the ownership of some mining sites. “There is conflict between Kit 1, Kaleng, Karpeto because all claim the mining areas [Nyonkir and Gumesi] to be part of their bomas. This has not escalated into violence because of our intervention [KADO].” These land and border conflicts are beyond the capacity of the bomas to resolve if other influential actors (politicians and businessmen) are involved.

Traders in Ngauro fear robbers at large in the mining sites of Vaka. Gold trading is carried out secretly and there is a great deal of mistrust. Everyone fears his neighbours. Shop owners fear other shop owners. A trader will instruct miners not to tell anyone how much gold he has taken from the mining sites. Robbery was frequently raised as an issue in Budi and Greater Kapoeta, but it is not really a worry for miners and traders in CES.

According to several interviewees in Ngauro, Vaka is a gathering point for criminals, with all the risks that this implies for the communities. “In Vaka, the most worrying thing is that many murderers come there. Anyone who has killed someone anywhere, he comes to Vaka.”

Child miner standing in artisanal mining hole in Greater Kapoeta
4. MAIN FINDINGS ON ARTISANAL MINING

**Environmental degradation**

Environmental degradation caused by artisanal mining seems to be of less a problem than the negative social impacts. Gold mined in all sites is pure and consequently there is no need to use mercury or cyanide to wash and clean it. Only a small number of interviewees said that erosion occurs as a result of mining. With increasing numbers of miners, however, erosion and deforestation may increase and lead to the destruction of the environment.

In several environmental management workshops or debates held at the national level in Juba, government authorities and environmentalists have always attributed the environmental pollution caused by South Sudan’s oil sector to inadequate environmental protection policies and related legislation. For the emerging mining sector it is of the greatest importance to speed up the formulation and adoption of such policies and laws.

**Impact on health**

Poor sanitation on site: Sanitation conditions are poor and consequently pose health risks in the mining sites, which are often far away from any settlement and health centre. People drink the water from the streams in which they both pan for gold and bathe and consequently are exposed to water-borne diseases.121

Accidents: Holes that are dug for mining are often not refilled. These holes sometimes cause injuries or even death to miners as well as to livestock.

The miners dig not only vertically but also horizontally underground, creating tunnels that follow the gold. These tunnels often connect a number of vertical holes, and are highly risky because sometimes they collapse, resulting in miners being injured or killed. People have been literally buried by walls caving in or whole tunnel systems collapsing.122 The Pwato payam administrator recalls a terrible accident that occurred when he was a child in Namurunyang, when a tunnel system collapsed and about 50 people died.123

HIV/AIDS: According to the Pwato payam administrator the HIV/AIDS infection rate is increasing. Today about 5 per cent of the payam’s 5,976 inhabitants are infected. One of the reasons is that many foreign women come to the mining towns and prostitute themselves for gold.124
5. MAIN FINDINGS ON SMALL-SCALE MINING AND EXPLORATION

According to the MPM Directorate of Mineral Development, since 2005, some 150 companies from around the world have expressed interest in mining in South Sudan. Many came and made one or two site visits, but few of these companies were legally registered to do so. In fact, until the Mining Act and Regulations came into force it was not legally possible for licences to be issued, but several authorities issued papers and allowed companies to go ahead with visits and sample-taking.\(^1\) In this chapter we present some small-scale and exploration companies in detail and look specifically at the relationship between them and the communities.

5.1 Community relations with small-scale mining companies

As described above the artisanal miners mostly mine the sands and soils in rivers or close to rivers. Small-scale miners who bring some machinery with them can dig deeper or process more sand and rock but they do actually mine the same deposits as the artisanal miners. They are attracted by artisanal mining sites and they establish operations with the intention of reaping quick rewards.

The assessment team encountered numerous difficulties when trying to get hold of some hard facts on small-scale mining. Generally, the communities and even the professional people whom the team met in Juba have no relevant documents and no contacts within the companies. In Lobonok and Gorom, as well as in Anak-nak, people could not give the exact name of the mining company operating in their area. They mostly referred to it as ‘the Chinese’.

Anak-nak (Kapoeta South): “The local government came to the area and told us that our areas would be upgraded into a payam and that time will come when large-scale mining companies will be brought to the area. We would welcome these companies. Last year some Chinese (a truck full of people) came to the area via the office of the county commissioner. These Chinese taught the community how to mine for the gold and they also took some samples in all the streams but never came back to show the results.”\(^1\)

Lobonok: KADO members in Juba as well as the communities indicated that there were at least two Chinese companies showing an interest in mining gold in Lobonok payam. The chairperson of KADO discovered that one of the companies was not even a mining company. “When visiting Lobonok a miner showed them gold and asked if they would buy it. The Chinese took the sample to China, analysed it and found that it is of high quality. So they went to MPM to get a licence, but when asked to submit their profile the Ministry found that it was not a mining company and rejected the request for the licence. The company went back to China to find a mining company as partner. The company got a provisional licence and took some soil samples. This was in 2009/10.\(^1\) Because of the unclear legal situation KADO shared their worries also with the Director of Industry and Mining in CES two years ago and concluded that all interested mining companies should wait until the regulations are signed. But beyond that, KADO also underlined that even if a company has a licence we will invite them to first sit down with us and the communities so that all will understand what the company intends to do and to reach an agreement.”\(^1\)

Corom: In 2010 a Chinese entrepreneur (called Li) came and constructed a compound with several houses and stores just next to the artisanal mining site about 2 km from Gorom village. The water pipes and a 5 m high washing device are still there. The company washed sand and stones from nearby. The chief says he does not know what the company found. The Chinese left for good some months later. According to the manager of the mining company Great Ramciel the business collapsed because of a misunderstanding between the two Chinese partners.\(^1\) Miners said that before the Chinese came they used to find a lot of gold on a plot close to where the Chinese built their washing device. The quantities could be as much as 50 grams a day per digger. But then the company dug up the soil and sands and transported it with a caterpillar tractor to be washed in the washing device. Subsequently, no gold has been found any more on this plot, according to the chief.

Wonduruba – Great Ramciel International

The story of Great Ramciel serves as an example for a number of our key findings. First, the secretiveness surrounding mining in South Sudan – only through many interviews was it possible to shed light on the story. Second, the experience shows how government authorities failed to do their duty and how confusing the situation was and still is concerning the legal framework. Third, it shows how things can easily go wrong with communities because of widespread and deep mistrust. Although the company’s founder is from Wonduruba and his
intention was to create jobs and bring development to the payam, gaining the necessary acceptance and consent that would have allowed operations to go ahead proved to be impossible.

Great Ramciel International Company Ltd is a South Sudanese company registered by the manager Nelson Mandela Jacob. Initially he intended to carry out construction work with the company. But as a native of Wonduruba he had artisanally mined gold in the past and was aware of the mining potential in the payam. When looking for a motorbike was in contact with a Chinese businessman, who put him in touch with another Chinese businessman who claimed to have the technical capacity and capital to go into small-scale gold mining. Before even seeking a licence the company held a number of meetings with the payam administration, the chiefs and other leaders to work out a memorandum of understanding (MoU) that would allow the company to mine gold in Wonduruba payam. A lawyer from Juba brought in by the community helped in the negotiations and drew up the relevant document to be signed. With the MoU the communities and payam consented to the company’s request to come and mine. The MoU covers the period from 2011 to 2024. The communities and payam administration agreed that the company could use the land and water it needs for the operations. The company agreed to pay rent for the land, ensure that insurances covered potential risks, employ locals and assist the communities and payam administration agreed that the company actually 6–10 kg. The manager, on the other hand, declared that the actual total was 4.245 g. This is equal to a value of about 150,000 USD. The first time the team interviewed him, the manager disclosed that the total sales were about 300,000 USD and that the gold had been sold via Kampala.

The company manager confirmed that it was a two-year process to get the MoUs and licence, to identify the best site and to open the road, but in the end operations only ran for about a month. According to the payam administrator no sum has been paid for the lease so far. So the only gain for the community is the road to Juba, which is not yet frequently used.131

According to the report submitted to the payam administration, the company had found 3 kg of gold. The company stayed in Togolo for about five months, during which time it only mined for one month. The payam administrator estimates that the company actually 6–10 kg. The manager, on the other hand, declared that the actual total was 4.245 g. This is equal to a value of about 150,000 USD. The first time the team interviewed him, the manager disclosed that the total sales were about 300,000 USD and that the gold had been sold via Kampala.

The company set up containers and machinery in Togolo, beside a stream north-east of Wonduruba and opened a small road from Juba to the mining site to get quicker access to the site. The company’s workers were using local tools as for artisanal mining but washed the sands and soils with a vibrator washing device for the panning.

The Ministry insisted that an MoU must be signed by a government representative, so some community representatives asked the area coordinator to sign it on behalf of the government and the signing was witnessed by the community elders. With this MoU the company went to the Directorate of Industry and Mining of the State Ministry of Finance & Economic Development to get an artisanal mining licence, which was issued on 15 July 2013. On the mining license there appears a photo of the Chinese businessman as representative of the company; yet artisanal mining licences can be issued only to nationals. It was clear that the company wanted to use machinery; yet artisanal mining is defined as using only traditional tools. According to our interviewees in the Directorate, the Mining Regulations signed into law in March 2015 had not (as of 27 May) officially reached the Directorate.

In an interview the payam administrator declared he was not aware that the company had obtained a mining license from the CES Ministry of Commerce, Industry, Mining and Investments – Directorate of Industry and Mining; however, he knew that a staff member of the directorate was in the field with the company to monitor the operations. Under the terms of an artisanal mining licence the licensee is supposed to pay a fee of 35,000 SSP per year per 1 km² rented. The manager claimed to have paid three separate fees of 50,000 SSP, then 15,000 SSP and an additional 10,000 SSP.

Later the community in Mongiling rejected the MoU, since the landowner of this community was not present when it was signed. He and the community felt that they would benefit more with a separate MoU and the company agreed to additional negotiations and also signed an MoU with this particular community. In this MoU the company agreed to fund additional community projects for Mongiling and to pay an annual fee of 4,000 USD for land rented from the community. It was this MoU that allowed the company to go to the site it had identified and to start operations.

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According to the Directorate the company gave up because it had depleted the deposits in the area allocated to it.132 The payam administrator concluded, by contrast, that the project finally failed and the company pulled out in 2014 for three reasons: first, it was unable to get a licence from the CES directorate; second, Mundari cattle rustlers had badly damaged the company’s containers in Togolo; and third, the signing of the second agreement caused a split among the people of the payam. What the company’s manager said was that the Chinese had abandoned the joint venture, because of the difficulties encountered with the communities and the authorities.

The community was and still is divided about this kind of mining. Some think a company could develop their area, while others think companies come to steal their gold.

There are a number of things in this whole story that do not add up. However, this is typical also of all small-scale mining initiatives that have been undertaken to date. Semi-official permissions and the unclear involvement of authorities at different levels have created a situation where interviewees are reluctant to disclose what they know.
Wonduruba/Woke – Bear Standard Golden Co-operative Society Ltd

An initiative to create a cooperative society was started by some people who are from Woke boma in Wonduruba payam. According to the manager the motivation behind this idea was the desire to bring development to the payam and to improve the production of gold.

Since the objective of the cooperative was gold mining, the necessary documents had to be obtained. The legal and institutional framework was still not clear, given that the Mining Regulations had not yet been signed, and the division of responsibilities between national and state levels had not been made known to the public, nor to the payam administration. So the founders of the cooperative, with advice from various ministries and lawyers, ended up having three certificates: a certificate of incorporation from the Ministry of Justice, in respect of the company they had set up; a certificate of registration from the State Ministry of Cooperatives; and an artisanal mining licence from the State Ministry of Commerce, Industry, Mining and Investment. The cooperative operates under the authority of the company, but both were founded by the same people. The licence, which the team was able to consult, allows for mining, panning and sale of gold for one year. It is quite expensive, at 45,000 SSP (7,500 USD) for the rent of 1 km². The licence has 13 clauses. The manager believes he has a licence for five years, but on the licence only one year is mentioned. According to him, the fee of 45,000 SSP has been paid. The licence was granted before the Mining Regulations came into force (March 2015). Mining regulations at state level do not exist yet.

To date, the cooperative has not really started working. The members intend to buy gold from the artisanal miners and eventually also to start mining. However, it is difficult to make a profit with the use of traditional tools, so would like to find funds to purchase larger-scale equipment.

5.2 Community relations with exploration companies

“Gold deposits in South Sudan are estimated in terms of millions of revenue. Large-scale mining will take some time before it starts realizing its potential due to constraints associated with lack of infrastructure such as paved roads, railways, energy and aerodromes. It is therefore possible to assume that only artisanal and small-scale mining will continue into the foreseeable future.” This view is echoed in a number of articles. Yet the example of Kibali gold mine in the DRC shows that once a sufficiently important deposit is discovered, investors will find ways and means to set up a mine. The team’s conversations with staff of the exploration companies confirm this view.

In the past, some companies managed to obtain some sort of licence, including those with little or no track record. In May 2015 three companies were granted the first official licences for exploration under the 2012 Mining Act: Equator Gold/CMERIC for the Luri concession covering territories in Bungu, Ganji and Wonduruba payams; Spear Mining/Equator Gold covering Udabi in Morobo County; and New Kush Exploration & Mining Company Ltd (NKEM) for a concession covering territories in Kapoeta East, Kapoeta South and Budi Counties. Because of having carried out systematic exploration activities in previous years, Equator Gold and New Kush are two years or more ahead of any other company that might come to explore or that has shown interest in the past.

This section introduces the companies with a short profile, followed by some facts and reflection on the community–company relations. The information presented here is based on extensive interviews with representatives of Equator Gold and NKEM as well as the communities in which the two companies run exploration operations. In addition, the respective company websites and documents made available by the companies were consulted and analysed.

Equator Gold and CMERIC

Equator Gold is an exploration group prospecting for gold in South Sudan. The principal shareholders are Richmond Partners Master Limited and Exploration Capital Partners (a fund of Sprott Asset Management), together with the group’s founders and their friends and family. Its registered offices are in Lymington, UK. The physical address in Juba is at the Lugali house where Equator Gold rents a container. In addition the company has a small camp in Bungu. Since the outbreak of civil conflict in December 2013, Equator has no permanent staff based in South Sudan. Company staff come to South Sudan only periodically for exploration activities or when there is a need to meet government officials. A South Sudanese lawyer with an office in Haj Malakal represents the company in South Sudan.

“South Sudan is the world’s most promising frontier exploration destination. We believe that Luri is a world-class project with a high probability of containing several multimillion ounce gold deposits. Equator’s top priority is to advance the project to resource evaluation as quickly as possible.”

The statements are taken from a document directed at potential investors, not the South Sudanese public, but they demonstrate Equator Gold’s interest and motivation for exploration in South Sudan. In the interview with the CEO of Equator Gold he declared: “We have gained experiences of how to work in South Sudan. We are familiar with the structures of the government and have constructive relations with the communities.”

CMERIC, Consolidated Minerals and Energy Resources Investment Company Ltd, has the Luri licence that covered 6,400 km² in 2007. In May 2011, Equator Gold signed an earn-in agreement with CMERIC. The two companies agreed that Equator Gold would have a 65% share of the earnings when investing a specific amount of money, and when there was a need to invest more the share would rise to 85%. CMERIC therefore will ultimately take a 15% share, but all the work and investment will have been done by Equator Gold. According to the CEO the complete process from exploration to finalizing the project will cost 15–20 million USD. From the interviews the team understands that CMERIC does not have the technical expertise and financial capacity to run any exploration work, and its founders had benefited from the situation following CPA, when it was easy to get licences.

After the signing of the Mining Act in 2012 the licence was turned into a provisional licence. “CMERIC, with Equator as its technical and financial partner, was granted a Provisional Exploration Licence under the Mining Act 2012 on 28 January 2013. Once the Regulations
were signed, CMERIC / Equator Gold applied for a full 5-year licence under the ‘grandfather’ rights granted under the Act.”

The size of the concession was reduced from 6,400 km² to 2,500 km², but all principal areas Equator Gold is interested in are still inside the new concession.

**Exploration: results and plans**

With the provisional licence Equator Gold started systematic exploration in 2012 in Ganji, Bungu and Wonduruba payams. After the war broke out in December 2013, it was not until mid-2014 that company staff could return. Equator Gold carried out trenching, soil sampling and geological mapping. Samples were taken in different locations, sifted and sent to a laboratory in Turkey (samples of 100 g). The samples were analysed for 52 different mineral elements including gold. Through these activities Equator Gold identified three targets with potential to find significant gold: Confluence Target, which is drill-ready (Bungu and Ganji), CT Target, also drill-ready (Wonduruba) and Togolo Target (Wonduruba).

In order to find the source of gold, drilling has to be carried out. Typically, between 6 and 20 drillings are necessary at this stage of exploration. Equator Gold will evaluate the results of the drillings and eventually extend the coverage of exploration. From 2015 to 2017 a number of drilling programmes will be implemented.

**Goal and final plans**

Equator Gold does not intend to mine in South Sudan but rather to prepare a major mining operation, as it does not have the capacity to run a mine. In 2017/18 it plans to do the feasibility study, draw up a business plan and apply for a mining licence. This project will then be submitted and eventually sold to a major mining company such as Randgold, AngloGold Ashanti or Barrick Gold. It would be possible for a mining operation to start from 2018 onwards. Randgold, the company that operates the Kibali Gold mine in north-east DRC, has already shown an interest: “South Sudan is frontier of choice for Randgold” (Mark Bristow, February 2014).

**New Kush Exploration & Mining Company Ltd (NKEM)**

“New Kush Exploration & Mining Company Ltd (NKEM) is a first mover gold exploration company focused on East Africa, particularly South Sudan, northern Uganda and Ethiopia, with a vision to discover new frontier mineral deposits hosting in excess of 3 million ounces of gold. NKEM has operated in South Sudan since 2006 and in February 2008 was the first exploration and mining company to be incorporated in Juba following the Comprehensive Peace Agreement (CPA). The company was the first modern day explorers for hard minerals in South Sudan, which included an extensive aeromagnetic and radiometric survey across NKEM’s concession areas awarded in 2007 in Eastern Equator.” NKEM has partners in other countries, but its only exploration operations are in South Sudan. It does not carry out mining anywhere.

New Kush’s two directors are based in the UK; the geologists’ department is in South Africa. There is one South Sudanese shareholder, who has lived in the UK since 1983. New Kush now has a physical address in Juba, and a South Sudanese lawyer represents the company and can act on the company’s behalf. It has 10 containers in its ‘Mango camp’ in Kapoeta but it does not have a permanent presence there.

New Kush previously had a licence for 10,000 km² covering parts of four counties (Kapoeta North, East and South as well as Budi). After the Mining Act was signed the company obtained a provisional licence in 2013 and could go ahead with exploration work, but then the war broke out and no substantial work was done in 2014. The licence for which New Kush had to re-apply in 2015 could not exceed 2,500 km², and it was granted a licence for an area of 2,492 km² covering most of Kapoeta South, and parts of North, East and Budi (Ngauro payam).

**Exploration work and results**

New Kush made multiple excursions, held community meetings, and took samples in the whole of Kapoeta South, part of North and East, and Budi. However, it focused in particular on Anak-nak (east of Kapoeta Town) and Napotpot (on the way to Narus). The two areas have been identified as the two priority targets. The company also did also some trenching. In Anak-nak the area covered is 16 km long and New Kush has found interesting structures there. The results are promising enough to bring in the drilling equipment: 976 samples have been taken and analysed in laboratories. The best sample contained 2 g of gold per tonne, but the average was much lower than that.

According to the company geologist whom the team met, New Kush needs to do more mapping. The mapping of the 2,492 km² will take four years, even though satellite images can be used. The company has identified the two priority targets but looks forward to finding others, and more trenching will have to be carried out. The first drilling will be done in Napotpot. Two rigs have been mobilised for Kapoeta and the intention was to mobilize the Napotpot rig by the end of March 2015. Because there are no permanent rivers and drilling needs a lot of water (10,000 litres a day), it is necessary to drill for water first.

**Goal and final plans**

Because of the remoteness of the area and the heavy investment necessary for mining New Kush is aiming to find a deposit of 6 g/t and is looking for a multimillion-ounce deposit. According to the company this is not unrealistic since there are huge deposits and mines in the same geological areas in neighbouring Ethiopia and DRC.

If New Kush finds massive deposits it will prepare a feasibility study and a business plan with a view to interesting a major mining company in the deposits. New Kush itself will not mine on any large scale, but in the case of a smaller deposit being found, it does not rule out going into production if this proves feasible.

**5.3 Policies with regard to community relations**

Equator Gold has policy statements and guidelines dealing with health and safety, environment and community relations, corporate social responsibility, bribery and ‘whistle-blowing’. “Equator Gold is dedicated to working closely with the stakeholders and communities in which it operates. Equator Gold understands that creating and sustaining good relationships with these communities is essential to the long-term success of the project. Equator Gold and their local partners are committed to providing opportunity for employment and training for people from local communities; to the procurement and use of local suppliers wherever possible; to observing and implementing best international practice in relation to social development, environment, security, and...”
health and safety issues; to identifying ways that our operations can benefit our host communities and to ensuring a long-term contribution to the sustainable development of local communities.  

Interviewed by the team, the CEO underlined the importance of creating good relations with the local communities. The company intends to achieve this principally through being ‘good neighbours’. For the CEO this includes information-sharing, local recruitment, local procurement of goods and services, and the provision of training and new skills for community members. A plan to improve information-sharing and community relations was prepared in late 2012 and was being implemented when operations were suspended following outbreak of civil conflict.

“NKEM is committed to providing and maintaining a healthy and safe work place and to responsibly manage all of the environmental aspects of its business. NKEM has a strong corporate responsibility ethos: we seek to work with local communities by choosing projects in conjunction with local communities, which under the guidance of local community leaders assist in improving social development. Such projects may include improvements in infrastructure, education, medicine as well as training of the local workforce.”

Neither Equator Gold nor NKEM has any community relations staff in South Sudan, because, according to the staff members met by the team, this would be too expensive.

As we have seen, though, both companies do have CSR policies. Nevertheless, a number of aspects that the assessment team felt were important in order to build constructive community relations are not dealt with in these policies. There is no specific policy or strategy with regard to conflict prevention, even though there is violent conflict in South Sudan, including in the exploration areas. There are no policies on compensation, community development agreements or community projects; both companies state that these are issues that will be attended to by whatever company develops the mine.

### 5.4 Practice with regard to community relations

In the discussion with the assessment team the manager of Equator Gold said: “There are always problems with communities. There are always some who are against you and some who are with you. It is the same everywhere in the world. There is always a range of interests between the different groups. We are aware that we cannot convince everyone.”

The assessment team feels that this is a very European way of looking at communities. This statement may be true for the relations with a diversified but organized and political active civil society in Europe but it is less true for South Sudanese communities. The way communities are structured in South Sudan offers the possibility of resolving differences and reaching consensus. Despite all the destruction and fragmentation that the communities experienced during the wars, there is still a respect for customs, local authorities and values on the part of a majority of community members in these payams. This should make it possible to reach agreements with communities, acceptable to the majority, even though some members may disagree.

NKEM stated that the company’s relations with communities were good and there were no major problems.

On the basis of all interviews the assessment team can compare communities’ expectations and companies’ practice.

The expectations formulated by the communities during the meetings were: to be recognized as one of the stakeholders in mining activity; to be informed and consulted in good time and in an accessible language; local peoples to be recruited in bigger numbers; the construction of schools, health centres, water points and roads; to have a direct share in what the communities consider as their resources.

Company–community engagement as practised by the two companies has five elements: cooperation with the Directorate of MPM, which is regarded as the key stakeholder to deal with; information-sharing; recruitment of local workers; being ‘good neighbours’; and corporate philanthropy.

Current company practice does not match the expectations of the communities.

Cooperation with the MPM Directorate, regarded as the key stakeholder to deal with

After some difficult experiences in the past, Equator Gold and NKEM now always take geologists from the Directorate for Mining when going to the field so as to create maximum transparency and to avoid raising any suspicions. Being accompanied by South Sudanese from the Ministry and from the police is also very important for the security of the missions. Equator Gold and NKEM have invested time and creativity in building a good relationship with the Directorate and other government officials. In spite of staff changes, an unclear legal situation, and decisions pending, the companies have managed to move ahead with exploration.

Clearly the companies expect guidance and support from the Directorate with regard to community relations, something the Directorate cannot deliver at the moment. It provides assistance in the form of geologists, but has no staff that deal with the community-related aspects of mining.

Information-sharing (consultation)

Consultation is always a challenge, but more so in South Sudan. To organize meaningful information-sharing and consultation in war-affected, traumatized communities will be very difficult even if companies, the government and NGOs work closely together. Another problem is the time needed for exploration. The assessment team’s geologist explained the stages of exploration in accessible language to the community in Ganji (from reconnaissance, to sampling, trenching and drilling) and explained what a sample is. The geologist explained how long an exploration process may take (5–7 years) and why. But most of the participants remained quite sceptical. People just cannot see why someone would come and take samples over years without getting any benefit.

At the time of research the assessment team found very little that could be qualified as consultation. It seems that Equator Gold and NKEM, as exploration companies, do not feel they have lead responsibility for the consultation processes; though in later correspondence Equator Gold did explicitly recognize
its responsibilities in engaging with stakeholders at an early stage and claimed to have put a lot of effort into formulating an engagement plan.

Equator Gold mostly provides information to the chiefs, on the assumption that they will play their role and share information with communities. Targeting key people such as the commissioner, payam directors and the chiefs, is not enough, however. The company used a presentation designed for an international public when it carried out information-sharing in Kulipapa, which will be one of the main locations for the drilling programme. Even if well translated into the local language this document is not suitable for community awareness-raising. The company has put up information noticeboards in some places. It feels that it has made great efforts to provide information, but does admit that the information-sharing programme broke down with the war in 2014. The company is planning to restart information-sharing, but with the use of other methods such as showing films about the Kibali mine or ‘coffee mornings’ to which the company will invite communities to come have a coffee or tea and get some explanations about the ongoing operations.

NKEM admitted that much more needs to be done and that there had been little information-sharing in the past years. Even in meetings with local authorities such as the chiefs and payam directors in places where NKEM has carried out exploration, people said they knew nothing about NKEM. Some said they had heard of the company, but none had taken part in any kind of consultation meeting.

Equator Gold and NKEM have faced accusations from the communities that they intend to take the communities’ gold. People suspect that their lack of knowledge about the process of exploration subject is being used in order to loot their wealth. At one time the communities had also denied access to an exploration site.

Equator Gold has a specific legacy to deal with. The founders of CMERIK came with technicians in 2007/08 to collect samples of soil for testing, but they never came back to explain what they intended to do and what they had found. The fact that CMERIK never disclosed any information on what they did and what they found created deep suspicion. Confronted with these suspicions Equator Gold organized in 2013 a major meeting in Juba County headquarters with the County Commissioner. All chiefs from all bomas and payams, and the leaders of the development committees and special interest groups, attended the meeting, during which Equator Gold explained the exploration process. According to the company, Juba County produced minutes of the meeting but, unfortunately, the assessment team was unable to see these minutes, because the County did not want to disclose the document.

Recruitment

Exploration does not need a large workforce. Few unskilled workers are needed and, only on a temporary basis, each dry season Equator Gold hires for exploration activities some people from the villages and trains them. Currently the company has two watchmen, and a foreman to supervise the workforce. For soil sampling Equator Gold hired a team of 30 people from Kulipapa and Bungu as well as 15 from Wonduruba. The workers are paid 40 SSP (6 USD) a day.

For sampling and trenching NKEM hired seven people temporarily. For drilling the company may also need seven people. “Whenever we need workforce we hire from the local community. We try to get those people from each payam, in the past from Kapoeta Town payam, Nuchi Payam, Napotpot Payam, and Nanaknak Payam. The locals we need are suggested by the chiefs. This is the only way. We are aware of the risk that the chief may privilege his family members and that this may also lead to conflict.”

‘Good neighbours’ but no community projects

Participants in the community meeting in Ganji confirmed that Equator Gold has disclosed that the licence covers Belle, Bungu, Kulipapa and Wonduruba and that exploration may take five years. The community had asked why it should take that long, and declared that the company should at least support one community project. When the team interviewed the CEO of Equator Gold he clearly stated that the company was not in South Sudan to implement community projects. “We have the money to drill but no money to build a school or a clinic. We invest money but we do not have guarantee that this will pay off one day. We need to limit costs, because it is difficult to raise money for exploration in places like South Sudan. It still could be many years before the mine is developed. We recognize the legitimate interests and we try to ensure that communities benefit by our proper activities – that is why we hire locals as much as possible. Our main intention is to be good neighbours. We also take sick people to the hospital but we don’t have money to do community projects. We could spend money for a clinic; but this does not help us to find the mine; we need to find the mine because then there is development; so instead of bringing now few things we must concentrate on exploration.”

According to NKEM, so far the company was not been faced with the people’s requests for projects like health units or schools. But even if communities did ask for them, NKEM is not ready to fund community projects like this. In an interview with a USIP research team the CEO of New Kush “cited unrealistic expectations among South Sudanese as to the benefits of mining ventures as a barrier to business in the new country: Community engagement projects are necessary for successful business in South Sudan. However, the more you give the more communities will ask. They see a kawaja [white person] and will expect large sums of money, without any knowledge of the complications of the mining sector. Expectations are too high and they are very difficult to manage.” Good neighbourly relations become concrete when we arrange for people to benefit from what the company invests anyway. “When we drill a water borehole for the drilling we do it in a way that this borehole can later be used by the community. We will put a hand pump or if appropriate even a solar pump so the community can access the water.”

Corporate philanthropy

Equator Gold’s plans for cooperation with a South African NGO to implement development projects have not yet been translated into action. NKEM has founded the New Kush Foundation, which is supposed to support development projects; the concept still has to be put into practice, but according to the company’s website some projects are under review. The suggested projects, however, like books for schools in Juba or an orphanage for war victims, do not have any connection with the communities that might be affected by exploration and mining activities.
6. CONCLUSIONS

Mining is a key source of livelihood for more than half a million people in South Sudan. All communities that the assessment team met stated that mining was of great importance and had helped to improve the standard of living of many families. So far, though, artisanal mining has not substantially contributed to community development. There are only isolated cases where communities have been able, through local taxation of miners, to implement some development projects, but there is potential for more of this kind of funding for development at local level.

Artisanal mining does have some negative effects, but these are manageable if stakeholders cooperate in dealing with them. As for small-scale mining and exploration, so far there are no benefits worth mentioning. This chapter summarizes some of the challenges described above and will help to understand the thinking behind the recommendations in the following chapter.

6.1 Specific challenges for artisanal mining
As in other countries artisanal miners in South Sudan face specific challenges.

Inadequate legal framework for artisanal mining
The government and legislators have substantially improved the institutional and legal framework for mining in South Sudan. Now the Mining Regulations are signed into law and a number of key problems have been solved, mainly with regard to small- and large-scale mining. But even though progress has been made there is need for further refinement of the framework particularly in respect of artisanal mining. This is the task of the states, yet the orientation provided by the Regulations are of limited use for artisanal mining as practiced at present. When the Mining Act and the Regulations were drawn up, artisanal mining was seemingly not a major concern. The licensing procedure and regulations seem inappropriate for artisanal mining. On the one hand the Regulations limit artisanal mining to traditional tools and prevent all technological improvement; on the other they place a heavy bureaucratic burden on artisanal miners which is far beyond their capabilities. According to the Regulations an applicant for an artisanal mining licence must provide, inter alia, a map showing the area under application, defined by coordinates and an Environmental Impact Assessment, and all documents required under the Environmental Law in relation to the Artisanal Mining Programme, prepared in each case by suitably qualified and experienced experts. This is not practically feasible for the artisanal miners we have met. Provisions in the Regulations such as those regarding records, reporting and mine closure are also totally unrealistic.

When artisanal miners learn about these regulations, most will clearly opt to continue mining without a licence and without any sense of doing something illegal – given that, after all, they feel that the gold belongs to them.

The states have not yet drawn up any artisanal mining regulations which could exempt applicants from the bureaucratic procedure and simplify the provisions. The artisanal mining licences that the assessment team has seen (Woke Cooperative and Great Ramciel) are also inappropriate for an artisanal miner, because really they are designed for small-scale mining.

Looking at the actual regulations there is seemingly no place for these rural poor families who struggle for survival and for whom gold mining is an additional income-generating activity that allows them to improve their livelihood.

Lack of information
Substantial progress has been made at national level to shape the legal and institutional framework. Yet all the miners and communities that the team met said they were not aware of the content of these regulations. None of the mining sites visited in CES is controlled or monitored in any way by the county, state or national government. Since the government bodies concerned with mining have no staff present in the field, there is no possibility of any meaningful awareness-raising being carried out in the communities with regard to artisanal mining, challenges and regulations.

The Directorate is aware of this shortcoming: “It is our role to sensitize the communities but it was not possible due to the absence of the laws and regulations. Now we are developing a work plan to start sensitizing the communities and with your efforts all these will be sorted out.” At present, however, the Directorate has no staff for community relations.

Lack of international attention to artisanal mining
International development agencies, NGOs and also most South Sudanese CSOs do not pay any attention to artisanal mining and are almost ignorant about the mining sector. They are of no support to miners and communities, which means that at present they cannot play a useful role as stakeholders in the mining sector. According to the Directorate, Cordaid is the very first international NGO in South Sudan to looks into artisanal mining.

Inappropriate technology and lack of technical expertise
All the artisanal miners we met work with rudimentary tools. They also have limited knowledge of how to discover deposits. Most of the mining sites are inaccessible because of non-existent or poor roads. In addition the new regulations have deprived the artisanal miners of any possible technical development of their activity. If they wanted to upgrade the technology they use and increase their output they would be obliged to get a small-scale mining licence. This is beyond their reach, however, because they neither have the resources to invest nor the technical capacity to run a small-scale operation.
Poor sanitation and impact on health
There are poor sanitation conditions and consequently health risks in the mining sites, which are often remote from any settlement and health centre. Accidents occur because of a lack of appropriate working methods and supervision. The HIV/AIDS infection rate is increasing in the mining sites because of unprotected sexual relations with people coming from different countries.

Environmental degradation
Environmental degradation through artisanal mining seems to be less of a problem than the social and health impacts, but with the growing numbers of miners, erosion and deforestation may increase.

Social impact and impact on livelihood
Artisanal mining has a negative impact on food security when mining becomes the main economic activity and farming is neglected.

Illicit trade
The gold trade conducted by general traders can be viewed as ‘semi-legal’ but they find it useful because it makes it easy for them to trade with Uganda and Kenya. These traders play a key role in providing basic commodities to the communities but because they operate in a grey zone, bribery and other corrupt practices are very likely to occur.

Gold is of high value and significant profits can be made by dealing in gold. This attracts all kinds of businesses and has led to illicit practices. Another major reason that gold-dealing is underground is that the South Sudanese Pound (SSP) is not freely traded and foreign exchange is tightly controlled, hence gold has become a currency. It is not the case that gold is sold at night, for example, or in absolute secrecy, but at the same time the involvement of relevant government institutions cannot be said to be completely clear and transparent. There are losers all along the way. The government loses because it takes no taxes from the gold-dealing business. The artisanal miners lose because they may be cheated and have no possibility of redress. The traders who would like to run a legal business find themselves up against competitors ready to bribe and smuggle.

6.2 Challenges for stakeholder engagement
A wide range of stakeholders were interviewed in order to get a picture of the current state of stakeholder engagement, including miners, communities, traditional authorities, government (national, state, local), deputies, exploration companies, small-scale mining companies, traders, dealers, non-governmental and international development agencies and civil society organizations. In our view stakeholder engagement is about facilitating communities’ participation in decision-making on issues that affect their lives. Though later feedback from one company seemed to indicate there were some efforts, at the time of research the assessment team could not establish the existence of a structured stakeholder engagement process or even an attempt at it. On the contrary the assessment team discovered a great deal of mistrust, misunderstandings, withholding of information, rumours and accusations. So although windows of opportunities have opened, with a regulatory framework now in place and increasing awareness of the importance of constructive relations with communities on the part of other stakeholders, no serious stakeholder engagement is currently in place.

Secretiveness
A serious and damaging secretiveness has developed around gold mining. This is due to the fact that a lot of illegal small-scale mining was and is ongoing, in which people from the political, economic and military elite are involved. In addition, the gold trade is more or less uncontrolled but a lot of money is generated. This attracts traders, adventurers, militias and influential leaders to become involved. Some of our interviewees indicated that high governmental officials, UN staff and even NGO staff were involved in gold trade and mining. The secretiveness obviously creates rumours and accusations of all kinds which are often impossible to verify but which
Contributing to a climate of mistrust and competition. In this climate an open sharing of information, needs, strategies, and challenges is impossible. The secretiveness, its causes and effects have seriously damaged relations and will make it very difficult to achieve constructive ways of dealing with each other.

Absence of government services for mining at local level
None of the mining sites is controlled or monitored in any way by the county, state or national government. There are only one or two initiatives at payam level, as in Wonduruba where the administration tried to make the miners register.

Consequently there is no possibility of any monitoring, substantial sensitization and consultation, conflict prevention, or support taking place. Even getting the government to better understand the needs of artisanal miners and communities is difficult. Mining communities feel completely neglected and think that the government is only interested in companies’ operations.

Neglect of community-related aspects
All directorates, departments and services dealing with mining pay close attention to the technical aspects, but seriously neglect the community-related aspects of mining. In addition the relationship between the different levels of government is still unclear and competition exists between them, to the detriment of the communities.

Technical aspects receive far more attention in the Mining Act 2012 and the Regulations compared with community-related aspects. Striking examples are section 62 of the regulations on Gender and Social Impact Assessment and section 63 on Borehole Licences. Section 62 looks at what is a very complex aspect of mining but only says, in one sentence, “A Title Holder shall provide to the Mining Cadastre Office approval from the Ministry responsible for Gender, Child and Social Welfare, of the gender and social impact assessment.” In contrast, section 63, dealing with a technical detail, takes 14 subsections and extends over two pages.

The only exceptions are the provisions for the Community Development Agreements, for which comprehensive separate regulations were being debated in parliament in July 2015.

Insufficient or inappropriate information-sharing and no community consultation
The few initiatives taken by companies to share information and to report on what they are doing are insufficient. The companies we met are those that at least have put some effort into information-sharing. But what about all the others, which send staff to mining areas, roam around, take samples, and bribe chiefs and local authorities?

Even the information-sharing done by Equator Gold and New Kush does not meet the needs of the communities and falls short of international good practice in community engagement. The information given is insufficient, presented in the kind of language that is difficult to understand, too infrequent, and not participatory enough to make a difference.

Community consultation is not specific as a clear obligation for small- and large-scale mining title-holders. In section 58 of the Regulations there is no mention of consultation but only a request to inform.

There are many things that can go wrong in stakeholder relations around mining, but the way communities are consulted sets the tone, right from the start. If consultation is not well managed it will be almost impossible to build a strong and respectful relationship – even if a lot of money is spent on community projects.

The participants from MPM and oil companies in a Cordaid training course on consultation in 2014 acknowledged and agreed on the gaps in stakeholder relations in general and particularly with regard to consultation. Participants committed themselves to communicating the insights and ideas that emerged during the training to the companies’ management and MPM senior staff, so that the issue of consultation is given proper consideration and decisions taken that will result in the development of policies that give consultation much greater priority than at present. This is a foundation to build on.

Compensation and resettlement
The Mining Act and Regulations as well as other legal documents are not sufficiently detailed and clear on compensation rights and procedures, or on resettlement. Compensation and resettlement are always very complicated issues. Legal aspects as well as practical aspects need to be considered and discussed by all stakeholders. There have been bad experiences regarding compensation and resettlement in the oil fields of South Sudan as well as those in other countries, but it seems these have not really been taken into consideration during discussions at political level on compensation and resettlement in the gold mining areas.

The different perspectives of exploration companies and communities on development
There is no easily perceivable ‘win-win’ situation in relations between the exploration companies and the communities. The communities want to see development but what they see the government and other development actors doing in this regard is far from what they expect. So it is understandable that they expect something from the new actors – the companies – which potentially will make a lot of money out of the resources that the communities feel belong to them. On the other hand, as we have described above, the exploration companies’ interest lies in preparing as quickly as possible and at low cost a mining project that is commercially viable and sellable to a major mining company. They do not want to lose time and money in implementing community projects.

Different strategies of small-scale mining companies but the same (negative) outcome
The approaches of the exploration companies and the small-scale mining companies are quite different. Whereas the exploration companies we interviewed try to avoid making any promises, the small-scale mining companies quickly try to win the acceptance of the communities by promising projects and development, although so far they have failed to deliver anything substantial.
Both approaches are inappropriate and have had a negative impact on company–community relations. Moreover, these different and contrasting approaches add to the already existing confusion at community level.

Community development agreements

Once the regulations on community development agreements are ready there is a comprehensive document available at decision-makers’ level which could encourage constructive discussion. However, no CDA has been implemented so far in any part of the country. Looking at stakeholder relations as they are at present, it is obvious that any negotiation on community development agreements will be a difficult process.

6.3 Recommendations

All the recommendations aim to focus attention on artisanal miners and communities and to adapt regulations and support to meet their needs.

A. Focusing attention on artisanal miners

Formalize the actual practice of artisanal mining

The following ideas are based on the finding that an estimated half a million people make their living to some extent through artisanal mining and the fact that SPLM promoted artisanal mining by the communities for over 20 years. With the new regulatory framework adopted, this practice of artisanal mining has become illegal. The miners do not understand this change and will not accept that the very basis for their livelihood has now been taken away. There is a need to re-legalize the mining activities of all the rural poor who depend on mining and to help them to develop this activity, just as is done for farming or livestock keeping.

Artisanal mining needs to become organized and to get support. This need was expressed by many of our interviewees, and some of them said that they had already brought it up with relevant authorities at state level. A number of Kapoeta-based staff of different ministries pointed out that the government should particularly help to improve the technologies used in order to make mining less dangerous and more profitable.

At international level, “there is an emerging consensus that formalisation is a key strategy for regulating the ASM sector, increasing the sustainability of activities, creating benefits for communities and minimising negative impacts [...] formalisation is an essential prerequisite for facilitating support of any kind for small-scale mining. Because formalisation relies on enforcement on the ground, it is important to involve local authorities and communities in policy-making processes, to ensure that locally-specific issues are considered. Hentschel et al. (2002) identify the decentralisation of control of the ASM sector as a way to ensure that legislation and regulation reflects the realities on the ground.”

The Mining Act and Regulations cannot, in their current versions, help to formalize and legalize artisanal mining. Formalization should be understood as a process that South Sudan has just embarked on. More efforts are necessary to shape future state regulations in a way that miners’ needs are taken into account and incentives are created for these miners to formalize their activities. It will take time and needs reflection and consultation with the artisanal miners themselves. Community-based initiatives like Karpeto Development Organisation (KADO) show how appropriate and realistic regulations can be developed.

The Alliance for Responsible Mining (ARM) has drawn up a legalization guide for artisanal and small-scale mining; the assessment team recommends consideration of the 14 guidelines it contains.

Develop and refine mining regulations at state level

In the following we suggest some very practical ideas that developed during the exchanges with miners and communities; all these ideas need further reflection, but could help to find a way to formalize and legalize the current practice of artisanal mining.

Redefine artisanal mining

It makes sense to define maximum depths, claim sizes or quantities of processed ore for artisanal mining. The exclusion of modern equipment, though, prevents artisanal miners from improving techniques and from increasing output. In line with miners, local authorities and other interviewees, we recommend allowing the use of detectors and other small machinery in order to make artisanal mining more profitable and sustainable.

 Licensing / Registration

Instead of obliging miners to apply for a licence at state level, a simple registration at payam level could be requested. Artisanal miners need to make themselves known to the payam authorities. Annual or monthly taxes could be set for artisans who have the capacity to invest in machinery like metal detectors, crushers, pumps or any kind of engine-driven transport could be taxed by state authorities. These taxes should be managed by the committee and 100% of it directly invested in community development efforts.

 Machinery tax: Artisanal miners who have the capacity to invest in machinery like metal detectors, crushers, pumps or any kind of engine-driven transport could be taxed by state authorities. Annual or monthly taxes could be set for each kind of machinery.

 Taxation

Different taxes can be fixed and collected by different levels of authority:

- Weekly or monthly mining tax: To be paid by all who mine independently, whether or not they find anything. This tax should be collected as in Lobonok, by a community development committee including payam administration, traditional authorities, local development initiatives and eventually advisers. Foreigners could pay a higher tax than local people. These taxes should be managed by the committee and 100% of it directly invested in community development efforts.

 Support to miners (organization; technology; marketing; development)

The Directorate told the assessment team that artisanal miners’ training centres may be established in the country. We recommend, in connection with this idea, several measures aimed at improving artisanal mining:
Explore for deposits suitable for artisanal mining and eventually reserve specific areas for artisanal mining as provided for in the Mining Act 2012, section 27.

Improve or introduce appropriate technology and tools including crushers, detectors, pumps, washing and panning devices, etc.

Provide training on how to effectively use and maintain these tools.

Provide miners with accurate information about the quality of the gold mined.

Provide training and accompaniment in revenue management.

Provide financial assistance or support Village Savings and Loan Associations (VSLAs) or other micro-finance institutions to help miners to access loans to buy better tools and equipment but also to access capacity-building.

Train artisanal gold miners in health, safety and environment issues in order to make artisanal mining safer and more sustainable.

Provide training and support for setting up cooperatives for mining and marketing. If artisanal miners organize themselves in cooperatives they can benefit from the advantages of operating in large numbers (better bargaining for prices and services, better access to development support, etc.).

Provide support for those who want to go into small-scale mining.

Provide training for the design, implementation and management of community development projects.

Provide security at the mining sites.

With regard to cooperatives: “Encouraging artisanal and small-scale miners to form cooperatives, enterprises or associations is one way that governments have attempted to organise the ASM sector in order to be able to regulate it. It is difficult for governments to govern individual miners, but when there is a cooperative, the head of the cooperative can be held responsible for health, safety and environmental issues, encouraging producers to take up more environmentally and socially responsible activities, such as excluding child labour and rehabilitating mines. Incentives to form cooperatives are often provided in the way of training and knowledge transfer or financial services for legal mining operations. The formation of cooperatives also supports communication, cooperation and coordination between miners, assisting them to share knowledge and resources, and may also contribute towards increasing local beneficiation.”

Implement minerals dealers’ regulations but open a limited space for trade by general traders and miners

The possibility of the government setting up buying points was discussed with a number of interviewees. There are doubts as to whether this could easily be implemented. The team recommends instead a pragmatic approach by licensing and controlling specialized gold dealers and allowing the continuation of gold trade to a limited extent by miners and general traders. In detail the team recommends:

- Enforce the Licence of Minerals Dealers Regulations 2014 and stop all unlicensed gold dealing.
- Allow the export of a reasonable quantity of gold by any miner.
- Allow gold trading to be conducted to a certain extent by general traders as it is practised at the moment. This needs to be defined to avoid misuse but it is in the interests of local development and the supply of commodities to keep this kind of gold trade going.
- Help miners to form cooperatives or other groupings to market their gold.
- To minimize cheating it might be helpful to oblige dealers to us electronic digital weighing scales.

B. Focusing attention on communities

Start a meaningful and constructive dialogue on mining’s contribution to sustainable development

The Mining Act 2012 refers explicitly to sustainable development, participation and stakeholder engagement. Stakeholder engagement is the process by which stakeholders develop and sustain their relationship with one another. Stakeholders include the companies (including sub-contractors), government (national, state, local), traditional authorities, communities, and civil society. There is a need to particularly reflect on how to engage with those who face difficulties in making their voices heard. It is about facilitating the communities in decision-making processes on issues that affect their lives.

With this in mind stakeholders can create a framework by engaging in a sustained dialogue process to address issues and challenges. Dialogue can only produce results when the parties can meet and talk on equal terms. Those who meet need to have the capacity to engage in dialogue and to have the trust and support of those they are representing. Communities and those who represent them – particularly traditional authorities, local councils and local development committees – must meet to clarify roles and strengthen their capacities in different aspects of mining as well as in self-reliant development action.

Governmental mining directorates and departments must recruit community relations officers and develop concepts and strategies for all community-related aspects of mining. In one way or another these institutions must organize a presence in the field. A clear signal to all stakeholders would be the creation of a Directorate for Community and Stakeholder Relations within MPM. Companies (small-scale and exploration) also should recruit staff for community relations and start to learn more about the communities they work with. Civil society and development actors must develop an interest in mining and develop their own capacity in order to meet the challenges.

It is important to find a practical way to get stakeholder engagement started. One possibility would be the preparation of a pilot Community Development Agreement (see below). It could also start with round tables held at different levels where stakeholders could engage in dialogue on specific issues in order to identify the most relevant ones and prepare the way for a search for solutions. For example, the reflection and dialogue could inspire the design and implementation of self-reliant development action by communities; the design of approaches that help communities to assess livelihood and to evaluate and document all economic, social and cultural assets, values, and rules and regulations, as well as relationships that are at risk through mining; the refinement of mining regulations at state level; approaches to independent and/or community-managed monitoring of company and government actions.
6. Conclusions

The relevant authorities from national and state level to start meaningful sensitization on community-related aspects of mining

MPM has planned to sensitize communities on the legal framework. It is important to sensitize but in such a way that gives room for communities to contribute with recommendations that can shape the refinement of regulations at state but also at national level. It is also the right time for MPM to develop guidelines and policies for consultation so as to be able to give orientation and support to companies in this regard.

An ongoing and honest consultation process starting in the early stages of an extractives project is crucial for constructive stakeholder relations and in particular for constructive company–community relations.

These consultations should cover all issues and aspects of mining including the legal framework, the shared responsibilities, artisanal, small- and large-scale mining and exploration. Community relations officers of MPM or state Directorates should be placed in places such as Lobonok, Ganji / Bungu, Wonduruba, Morobo, Kajoeka, Ngauro, Narus and Boma.

Exploration companies must find an appropriate way of regularly sharing important information and of consulting with the communities

Companies need to reflect on the way they analyse communities’ reactions and behaviour. If a company sees the questions and criticisms raised by communities as a genuine and honest sign of lack of information it will invest in the improvement of communication. But if the company sees the questions and criticisms purely as a negotiation position taken by the communities, with the hidden agenda of getting something out of the company, then it might even reduce its disclosure of information. The way a reaction is analysed will shape the strategy to respond to it.

More information-sharing is needed in order to strengthen constructive forces and voices in the communities. Companies should open offices in key communities of the exploration areas, recruit and train community relations officers or collaborate closely with governmental community relations officers in these places.

Consultation is understood by the assessment team as a comprehensive approach to promote the constructive engagement of companies, government and communities – a process that allows exchange, dialogue and negotiation, leading to collaboration. Consultation means that information is shared, received, analysed and discussed in order to build mutual understanding: for a company to understand communities’ culture, values and aspirations, and for communities to understand a company’s principles, objectives, operations and practices. Honest consultation means that decisions affecting communities are taken together and that the powerful do not proceed without consent even if this would be legally permitted.

Consultation is capacity-building in two directions: the companies and governmental services learn from the miners and communities, and these gain knowledge and insights brought to them by the other stakeholders.

Develop appropriate concepts and procedures for compensation and resettlement

Compensation must replace the lost resource base (e.g. land) on which people had made their living, in order that they can secure a sustainable livelihood in future. This principle has been confirmed by various international institutions, including the World Bank. Compensation is a right and not a favour given by the company or government. But even when these principles are respected there is a high risk that the way in which a compensation plan is designed can add to the challenges of a mining project. To avoid the devastating effects of an inappropriate compensation plan it is suggested that the focus be on livelihood, respect for the communities’ land rights, the importance of the community (and not the individual), and community participation and engagement.

An analysis of the bad experiences in the oil fields of South Sudan as well as in other countries should also inform these reflections.

Start a pilot Community Development Agreement in one of the exploration areas

South Sudan has opted for a CDA approach to promote development, in the case of large-scale mining. However, there is a need to give early consideration to how CDAs are to be implemented in such future large-scale mining operations in order to learn, to improve and adapt the concept, procedure and implementation to the South Sudanese context.

“CDAs represent an important mechanism in seeking to ensure that communities benefit from projects […] while at the same time providing investors with the community support they require if commercial activity is to be sustainable over the long term. The potential can only be fully realized if they result from negotiations in which bargaining power is not heavily skewed in favour of investors. Of particular importance is the need to pursue equity in the distribution of benefits created by CDAs… and to ensure that CDAs are enforceable and are implemented, actually delivering the benefits promised in agreements.”

Considering the current state of stakeholder relations, the lack of experience in all stakeholders of how to implement a CDA and the particular challenges of a CDA process, the assessment team recommends that a pilot process be started for the design and implementation of a CDA in one of the mining areas. This should be a joint undertaking of the Directorates from MPM as well as the state, exploration companies, a neutral facilitating party (for example, Cordaid) and selected South Sudanese NGOs. The process and implementation could be co-funded by government and the companies. The basis for the negotiations could be a facilitated development planning process co-organized by the communities. The communities must understand that it is a pilot process aiming to refine the methodology and procedures.

The pilot could inspire implementation of CDAs in the future, and create and strengthen capacities at government, community and CSO level.
Contribute to constructive relations between communities and small-scale mining companies

Small-scale mining is regulated through the Mining Act and the Regulations, yet it is the type of mining where illegal and damaging practices are the most developed. As for exploration companies there is a need to look into company–community relations. Community-related aspects of small-scale mining are dealt with in less detail in the Act and Regulations yet constructive community–company relations are as important as for large-scale and exploration operations. All the above recommendations apply also to small-scale mining. In addition the team recommends:

- Enforce the Mining Regulations and control all mining sites and operators.
- Discourage small-scale mining operations in sites where these companies will directly come into competition with artisanal miners.
- Support small-scale-mining companies in their efforts to come to an agreement with the communities.
## ANNEXE I - OVERVIEW OF INTERVIEWS AND GROUP DISCUSSIONS

### Interviews

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<tr>
<td>1</td>
<td>Under-secretary for Mining</td>
<td>17 November</td>
<td>Juba</td>
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<td>2</td>
<td>Project Manager – Pact</td>
<td>18 November</td>
<td>Juba</td>
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<td>3</td>
<td>EES Deputy Governor</td>
<td>20 November</td>
<td>Torit</td>
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<td>4</td>
<td>EES State Minister of Finance, Commerce, Investment &amp; Economic Planning</td>
<td>20 November</td>
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<td>5</td>
<td>Deputy Director of Directorate for Mining and Industry</td>
<td>20 November</td>
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<td>6</td>
<td>Director RRC-EES – Relief and Rehabilitation Commission in EES</td>
<td>21 November</td>
<td>Torit</td>
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<td>7</td>
<td>Team leader Civil Affairs Division – UNMISS</td>
<td>21 November</td>
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<td>8</td>
<td>Area Programme Manager NCA – Norwegian Church Aid</td>
<td>21 November</td>
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<td>9</td>
<td>Project Manager VNG</td>
<td>21 November</td>
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<td>Coordinator Justice and Peace Commission – CDoT</td>
<td>21 November</td>
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<td>Managing Director Caritas – CDoT</td>
<td>21 November</td>
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<td>Legal Aid Attorney – South Sudan Law Society Torit office</td>
<td>21 November</td>
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<td>13</td>
<td>Project Coordinator – Youth Anti Aids Service Organization (YAASO)</td>
<td>21 November</td>
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<td>14</td>
<td>Boma Chief – Gorom / Rejaf Payam</td>
<td>22 November</td>
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<td>Director-General – Directorate of Mineral Development – MPM</td>
<td>26 November</td>
<td>Juba</td>
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<td>16</td>
<td>Strategic Minerals Sector Adviser – Adam Smith International / MPM-Directorate of Mining</td>
<td>24 November and 10 March 2015</td>
<td>Juba</td>
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<td>17</td>
<td>Head of Exploration Unit – Directorate of Mineral Development – MPM</td>
<td>19 February, 10 March, 15 May</td>
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<td>18</td>
<td>Director – Directorate of Industry and Mining – CES State Ministry of Commerce, Industry, Mining and Investment</td>
<td>20 February</td>
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<tr>
<td>19</td>
<td>Commissioner – Juba County</td>
<td>25 February</td>
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<td>20</td>
<td>Payam Director and Police Officers – Lobonok Payam</td>
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<td>Yapa Boma Chief – Lobonok Payam</td>
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<td>Payam Director, Bungu Payam</td>
<td>03 March</td>
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<td>KADO Chairperson and Exploration Manager at DPOC</td>
<td>03 March</td>
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<td>Managing Director Equator Gold</td>
<td>04 March</td>
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<td>KADO board members, secretary of finance at SSLA and accountant at SSLA</td>
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<td>Acting Payam Administrator</td>
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<td>Wonduruba</td>
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<td>Project Geologist – New Kush Exploration &amp; Mining Limited</td>
<td>06 March</td>
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<td>31</td>
<td>Director GIS centre / Remote sensing / University of Juba</td>
<td>09 March</td>
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<td>32</td>
<td>Manager of Bear Standard Golden Co-operative Society Ltd</td>
<td>10 March</td>
<td>Juba</td>
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### Position and Organization Table

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<td>33</td>
<td>Geologist CES Directorate of Mining Attached to the Greater Ramcell International Company</td>
<td>15 March</td>
<td>Juba</td>
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<td>34</td>
<td>Director of Environment, EES</td>
<td>13 May</td>
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<td>35</td>
<td>Acting Deputy Director Admin and Finance – State Revenue Authority, Torit.</td>
<td>13 May</td>
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<td>36</td>
<td>National Security Officer, Kapoeta South</td>
<td>14 May</td>
<td>Kapoeta Town</td>
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<td>Town Clerk, Kapoeta South</td>
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<td>Payam Director and Acting Executive Administrator, Pwato Payam</td>
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<td>Community Development Officer, Kapoeta South County</td>
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<td>Acting Director Gender, Culture and Social Development – Kapoeta South County</td>
<td>15 May</td>
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<td>42</td>
<td>Manager of Great Ramcell International</td>
<td>18 May</td>
<td>Narus – Kapoeta East County</td>
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<td>43</td>
<td>Director for Agriculture</td>
<td>18 May</td>
<td>Narus – Kapoeta East County</td>
</tr>
<tr>
<td>44</td>
<td>Deputy Education Director</td>
<td>18 May</td>
<td>Narus – Kapoeta East County</td>
</tr>
<tr>
<td>45</td>
<td>Office manager of Commissioner – Budi County</td>
<td>19 May</td>
<td>Chukudum</td>
</tr>
<tr>
<td>46</td>
<td>County Commissioner – Budi Executive Director – Budi</td>
<td>19 May</td>
<td>Chukudum</td>
</tr>
<tr>
<td>47</td>
<td>Gold dealer</td>
<td>20 May</td>
<td>Ngauro</td>
</tr>
</tbody>
</table>

### Focus Group and Community Discussions

<table>
<thead>
<tr>
<th>NO.</th>
<th>GROUP</th>
<th>NUMBER OF PARTICIPANTS</th>
<th>DATE (2015)</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KADO Youth – Karpeto Development Organisation</td>
<td>30</td>
<td>27 and 28 February</td>
<td>Karpeto – Lobonok Payam</td>
</tr>
<tr>
<td>2</td>
<td>Health staff of health unit (PHCU)</td>
<td>5</td>
<td>27 February</td>
<td>Karpeto – Lobonok Payam</td>
</tr>
<tr>
<td>3</td>
<td>Traders, Pastors, Youth spokesperson from Ganji Payam</td>
<td>12</td>
<td>01 March</td>
<td>Ganji</td>
</tr>
<tr>
<td>4</td>
<td>Ganji Payam Community from all a bomas</td>
<td>60</td>
<td>01 March</td>
<td>Ganji Payam Headquarters, Meeting tree</td>
</tr>
<tr>
<td>5</td>
<td>Community representatives (Head Chief, elders, miners)</td>
<td>15</td>
<td>05 March</td>
<td>Wonduruba</td>
</tr>
<tr>
<td>6</td>
<td>Artisanal miners, chiefs, elders</td>
<td>50</td>
<td>16 May</td>
<td>Anak-nak – Pwata Payam, Kapoeta South</td>
</tr>
<tr>
<td>7</td>
<td>Narus community: Paramount Chief, Payam Chief, Elders from different payams and youth</td>
<td>10</td>
<td>18 May</td>
<td>Narus, Kapoeta East County</td>
</tr>
<tr>
<td>8</td>
<td>Payam Head Chief, elders, policemen, miners</td>
<td>15</td>
<td>20 May</td>
<td>Ngauro – Budi County</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>197</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Validation Workshop

<table>
<thead>
<tr>
<th>NUMBER OF PARTICIPANTS</th>
<th>DATE (2015)</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>1 – 2 December</td>
<td>TM Lion Hotel, Juba</td>
</tr>
</tbody>
</table>
## ANNEXE II - TENTATIVE ESTIMATIONS OF MINER NUMBERS AND PRODUCTION PER MINER

<table>
<thead>
<tr>
<th>COUNTY / PAYAM</th>
<th>ESTIMATED NUMBER OF MINERS</th>
<th>G PER DAY PER MINER</th>
<th>COMMENTS / QUOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobonok</td>
<td>3,000 – 5,000</td>
<td>1 – 2</td>
<td>There are many miners at the mining sites during the rainy season. In the mining season it can go up to almost the population of Karpeto Boma which is about 4,000 miners. The Payam Head Chief estimates about 12 mining camps in the mining sites. The chief of Kit 1 estimates that about 3,000 people mine at the sites.</td>
</tr>
<tr>
<td>Ganji</td>
<td>3,000 – 6,000</td>
<td>1 – 4</td>
<td>Ganji: Most people mine and most miners are locals; 22,500 inhabitants live in the payam.</td>
</tr>
<tr>
<td>Bungu</td>
<td>3,000</td>
<td>1 – 4</td>
<td></td>
</tr>
<tr>
<td>Rajafer (Gorom)</td>
<td>50</td>
<td>1 – 5</td>
<td>Until 2010 there were as many as 800 diggers digging on the site in Gorom. In late 2014 there were only 21 miners. In the dry season very few miners were working. All depends on chance; sometimes one would find 50 gram a day but often nothing or only 1 to 5 grams. There was one digger who found 3 kg a day.</td>
</tr>
<tr>
<td>Juba total</td>
<td>9,050 – 14,050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wonduruba</td>
<td>1,200 – 1,600</td>
<td>2 – 4</td>
<td>Artisanal mining takes place in 4 areas. There are 300–400 miners in each site.</td>
</tr>
<tr>
<td>Morobo</td>
<td>5,000</td>
<td></td>
<td>Udabi is an important site in Morobo county.</td>
</tr>
<tr>
<td>Kajo-Keji</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lainya</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kapoeta South</td>
<td>10,000</td>
<td>6</td>
<td>Large number of sites</td>
</tr>
<tr>
<td>Kapoeta East Anak-nak</td>
<td>2,000 – 4,000</td>
<td>1 – 6</td>
<td>Miners say it used to be easy to find gold nuggets. But now tens of thousands of South Sudanese are mining, and it can take days to find a single gram. Number of people using metal detectors might reach 200 in Naknak. And those digging without metal detectors might reach 2,000–4,000. If one is lucky one might get up to 1,500 SSP worth of gold in a day.</td>
</tr>
<tr>
<td>Kapoeta East / Napotpot and others around Narus</td>
<td>4,000</td>
<td>1</td>
<td>Large number of sites in the county. Population at mining sites may reach 4,000. Men, women, children. Some camp and sleep there. When got 3,000–4,000 SSP he goes home, satisfied for the moment.</td>
</tr>
<tr>
<td>Budi / Ngauro</td>
<td>5,000 – 10,000</td>
<td>3 – 15</td>
<td>Approximately five to ten thousand miners during rainy season and maybe three to seven thousand during dry season. In Vaka alone there are more than 500 miners. The site is also known for its high potential. A miner can find gold worth 1,000 SSP to 5,000 SSP a day. Some in a month might get 25 grams.</td>
</tr>
<tr>
<td>Budi other sites</td>
<td>4,000</td>
<td></td>
<td>Nakishot Mountains Area is the most productive area in Budi County, according to the Commissioner of Budi County. He told us, a Kenyan man was said to have found a gold nugget as big as a water jug! Yet he escaped with it untaxed! And now we've banned foreigners entering the mining points and mining.</td>
</tr>
<tr>
<td>Other states</td>
<td>20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51,000 – 73,000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEXE III - TYPES OF MINERAL TITLES

<table>
<thead>
<tr>
<th>TYPE OF LICENCE</th>
<th>DURATION</th>
<th>AREA</th>
<th>EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconnaissance</td>
<td>2 years</td>
<td>Maximum of 25,000 sq km (177,398 CUs) and minimum of 10 sq km (47 CUs)</td>
<td>Not renewable</td>
</tr>
<tr>
<td>Exploration</td>
<td>5 years</td>
<td>Maximum of 2,500 sq km (11,760 CUs) and minimum of 10 sq km (47 CUs)</td>
<td>Renewable for 2 terms of 5 years each</td>
</tr>
<tr>
<td>Small-scale Mining</td>
<td>10 years</td>
<td>Max / Min of 1 sq km (5 CUs)</td>
<td>Renewable for 10 years</td>
</tr>
<tr>
<td>Small-scale Mining Licence for State Natural Resources</td>
<td></td>
<td>Max / Min of 1 sq km (5 CUs)</td>
<td></td>
</tr>
<tr>
<td>Large-scale Mining</td>
<td>25 years</td>
<td>As required by the mining operation. No more than to cover the proposed mining area reasonably required for surface and or underground mining and treatment facilities and also to cover the proven, indicated and inferred resources with a maximum of ~50 sq km (235 CUs) and minimum of ~1 sq km (5 CUs)</td>
<td>20 years each</td>
</tr>
<tr>
<td>Retention</td>
<td>5 years for Exploration Licence and 6 years for Mining Licence</td>
<td>The same as for Exploration or Mining Licences</td>
<td>Not renewable</td>
</tr>
<tr>
<td>Artisanal Mining</td>
<td>No time limit</td>
<td>Max / Min 1 sq km (5 CUs)</td>
<td>Must be renewed annually</td>
</tr>
</tbody>
</table>

CU = Cadastral Unit
Source: MPM, Directorate of Mineral Development

The retention licence allows the companies to retain the right to production during a period when prices are low, so as to be able to pause exploration or production until the prices are higher.
Price of gold varies from Payam to Payam. According to our interviewees in the different payams and bomas the following prices are paid by the traders and dealers:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>PRICE PER GRAM</th>
<th>TRADERS / COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobonok payam</td>
<td>150 SSP – 200 SSP</td>
<td></td>
</tr>
<tr>
<td>Karpeto, Kelang and Kit 1 boma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobonok payam</td>
<td>120 SSP – 150 SSP</td>
<td></td>
</tr>
<tr>
<td>Yapa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rajaf payam, Gorom village</td>
<td>180 SSP in Gorom and 200 SSP in Juba</td>
<td>In Ganji the USD price was also important because some miners send the gold to Uganda to be sold there. With the money they support family members or students who live in Uganda.</td>
</tr>
<tr>
<td>Ganji payam</td>
<td>200 SSP to 300 SSP</td>
<td>Price in Uganda varies with the dollar exchange rate: 40 – 45 USD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In Ganji the USD price was also important because some miners send the gold to Uganda to be sold there. With the money they support family members or students who live in Uganda.</td>
</tr>
<tr>
<td>Wonduruba</td>
<td>300 SSP</td>
<td></td>
</tr>
<tr>
<td>Pwato / Anak-nak</td>
<td>260 SSP</td>
<td></td>
</tr>
<tr>
<td>Kapoeta town</td>
<td>370 – 380 SSP</td>
<td>A gram sells for between 36 and 47 dollars, said Kenyan trader Samuel Mutham Kivuva, a spokesman for around a thousand foreign middlemen in the gold trade, allowing a small profit for resale down the line.183</td>
</tr>
<tr>
<td>Ngauro town</td>
<td>320 SSP</td>
<td>1 gram of gold costs 320 SSP at Ngauro. Muhamad said the price used to be 120 – 180 SSP per gram two years ago. In Kenya it is 36 USD per gram. That equals 500 SSP.184</td>
</tr>
<tr>
<td>Ngauro mining site</td>
<td>240 SSP</td>
<td>Prices at the mining sites are different: 240 SSP. Here in the town it is sold at 320.185</td>
</tr>
</tbody>
</table>
MINING IN SOUTH SUDAN

NOTES AND REFERENCES

1. For more on MPM see: http://mpmisouthsudan.org/
2. For more on SSLS see: http://www.sslawsociety.org/
3. Before independence in 2011 it was the Government of Southern Sudan (GoSS). Since then the government has been referred to as the Government of the Republic of South Sudan (GRSS).
4. Mining Act 2012, Purpose, pp 10-11: “The purpose of this Act is to provide for, encourage, promote and facilitate Reconciliation, Exploration, Development and Production of Minerals and Mineral Products in South Sudan, consistent with the principles of sustainable development which inter alia include that government and industry, in their respective policies and practices, acknowledge their stewardship of the Mineral Resources of the country, and work with local communities, so that the economy is developed and the Environment is preserved, for the benefit of present and future generations of South Sudanese; and that responsibility for sustaining a sound and healthy Environment alongside development of a sound and healthy mining industry is a responsibility that is shared by government and industry, working with local communities.”
5. See, for example, the research papers of Dr Andu Esbon Adde.
8. Source: Ministry of Petroleum and Mining (MPM).
9. Dr Andu Ebson Adde, ‘Geology And Mineral Investment Opportunities in South Sudan’, May 2013
10. Interview with CEO of Equator Gold, Juba Cordaid offices, 04.03.2015
14. For more about PAX in South Sudan see: http://www.paxforpeace.nl/our-work/programmes/south-sudan
15. Interview with County Paramount Chief and Narus payam Head Chief, Narus County HQ, 18.05.2015
16. Interview with community in Anak-nak, 16.05.2015
17. IRIN, ‘Hunger drives hunt for gold in South Sudan’s east’, http://www.irinnews.org/report/98204/hunger-drives-hunt-for-gold-in-south-sudan-s-east: “The Toposa... have now been joined by an estimated 60,000 artisanal diggers and panners lured by the gold rush.”
21. Interview with Dr John A. Aiki and others at University of Juba, 09.03.15
22. Interview with payam director and police officers, Tombur, Lobonok Payam Guest House, 26.02.2015
23. Interview with payam head chief and others, Karpeto and Tombur, 27.02.2015
24. Known only by his first name, Stelios.
25. Kose Gumbri was chief of greater Karpeto which comprised Karpeto, Kit1 and Kaleng. After the Comprehensive Peace Agreement (CPA) was signed, Karpeto was divided into three bomas. Hakim Joseph Yaga and others, Karpeto Primary Health Care Unit (PHCU), 27.02.2015
26. An empty cartridge case used with the British 303 rifle, locally known as ‘abu asara’ (meaning ‘containing 10 bullets’) was employed to measure the quantity of gold.
27. Interviews with community representatives of Ganji Payam in Ganji, 01 and 02.03.2015
28. Interview with paramount chief and payam chief, Narus County Building in Narus, Kapeota East, 18.05.2015
29. Interview with community in Anak-nak, 16.05.2015
30. Interview with Pwata payam chief, 15.05.2015
32. An article written in 1998 by a freelance journalist and distributed by IRIN contains one of the very few existing references to the SPLA’s mining activities or plans: IRIN, http://www.mardao.com/301/201
33. Interview with boma chief Patric Ladu, Gorom boma, 14.11.2014
34. Interviews with community representatives of Ganji payam in Ganji, 01. and 02.03.2015
35. The Sudan Armed Forces (SAF) never reached Wonduruba; the area was always under control of the SPLA.
36. Interview with boma chief, Yapa boma, shop in the centre of the boma, 27.02.2015
37. Interview with payam director and police officers, Tombur, Lobonok payam Guest House, 26.02.2015
38. Interview with payam head chief and others in Wonduruba payam HQ, 05.03.2015
41. Stephen Dhieu Dau, Minister MPM, Country Presentation at the Mining Indaba conference, Cape Town, South Africa, 4-7 February 2013
42. The interest of Australian companies seems to be one of the key motivations for the Australian government being active in helping South Sudan to develop regulations.
43. Interview with CEO of Equator Gold, Juba Cordaid offices, 04.03.2015
44. David K. Deng, Paul Mertenskoetter and Luuk van de Vondervoort, Establishing a Mining Sector in Postwar South Sudan, USIP Special Report, 2013, p. 1
46. MPM: South Sudan Mining brochure
47. See Annexe III.
48. The retention licence allows the companies to retain their production rights during a period when prices are low, so as to be able to pause exploration or production until the prices are higher.
49. Interview with CEO of Equator Gold, Juba Cordaid offices, 04.03.2015
50. The state natural resources are basically quarry minerals but do not include mineral resources like gold.
52. Mining Act 2012, p. 17.
Mining Act 2012, p. 55.
Mining Act 2012, p. 45.
Mining Regulations.
Section 61 of the Regulations: “1: Where, based on the results of the Environmental and Social Impact Assessment and review, the Minister in coordination with the relevant Government agencies determines that resettlement is a necessary action of last resort, the Title Holder of a Large-Scale Mining Licence shall, in consultation with the impacted population and relevant stakeholder communities, prepare a Resettlement Action Plan. 2: The Resettlement Action Plan shall be prepared by the Title Holder of a Large-Scale Mining Licence in public consultation with the affected community based on the Land Act of South Sudan, and shall include detailed provision for the financing of the compensation of resettled individuals, timetable for performance and mechanisms for regular review and evaluation.”
Mining Regulations
Mining Regulations
Stephen Dhieu Dau, Minister MPM, Country Presentation at Mining Indaba, Cape Town, South Africa, 4-7 February 2013
Interview with chief, police and community members, Ngauro town, 20.05.2015
Interview with Pwato payam chief, Huleu Hotel, Kapoeta town, 15.05.2015
Interview with community in Ngauro, 20.05.2015
Interview with Project Geologist, NKEM, Juba, 06.03.2015
Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
Interview with the acting executive administrator and the payam director of Pwato, Administrator’s office, 14.05. 2015
Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
Interview with project geologist, NKEM, Juba Cordaid offices, 06.03.2015
In any given community, it is usually the chiefs who are in charge of land and land distribution.
Because of the SPLA training camp nearby, the area is tightly monitored by security agents.
Interview with Gorom chief, chief’s compound, 14.11.2014
Interview with Head of PHCU, PHCU Karpeto, 27.02.2015
Interview with chief, police and community members, Ngauro town, 20.05.2015
Interview with KADO members, SSLA, 04.03.2015
Interview with Pwato payam chief, Huleu Hotel, Kapoeta town, 15.05.2015
Interview with Gorom chief, chief’s compound, 14.11.2014
Interview with acting payam administrator, Wonduruba HQ, 05.03.2015
Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
Interview with community in Anak-nak, Anak-nak, 16.05.2015
Interview with the town clerk of Kapoeta town, town clerk’s office, 15.05.2015
Interviews with acting deputy director of administration and finance in the State Revenue Authority, Torit, 13.05. 2015
Interview with acting executive administrator and payam director of Pwato, administrator’s office, 14.05. 2015
Interviews with communities’ representatives and traders of Ganji payam in Ganji, 01.03.2015
Interviews with communities’ representatives and traders of Ganji payam in Ganji, 01.03.2015
Prices were quoted when the exchange rate was approximately 1 USD = 6 SSP on the black market.
Interview with trader in Ngauro market, 20.05.2015
Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
Interview with community in Anak-nak, Anak-nak, 16.05.2015
Interview with community in Anak-nak, Anak-nak, 16.05.2015
Interview with commissioner and acting executive director of Budi County, County HQ, 19.05. 2015
Stonepass is one example; according to MPM, it is a company founded by a businessman from Botswana. He applied for a licence and first it was not even clear what he was interested in (exploration, mining or trade). Finally he applied for a dealer’s licence, but was told by MPM Directorate to wait until the licensing procedure was enacted. Nevertheless, with strong backing from the Governor of Eastern Equatoria he managed to get a dealer’s licence from the Directorate. He recruited a manager and brought academics from Juba University on board without being very clear about his intentions. Some students went to conduct research in Kapoeta within the concession held by New Kush. New Kush explained: The Directorate instructed Stonepass to stick to gold trading and stop carrying out exploration work. The company, which never made public any information about its activities, left South Sudan at the end of 2014 and did not return; it now has no office in Juba or EES.
Responses to questionnaire, chairperson of KADO, 23.03.2015
Gold rolled in a piece of nylon and equal in size to a match head of an Indian-made wax match sells at 25 SSP: half a gram is a 1967 Congolese coin: ‘10’; 1 gram is a 1967 Congolese coin: ‘1K; 4 grams is a Tanzanian coin (Ungazi Afrika): ‘50’; 5 grams is a Sudanese coin: 50 piasters; 7 grams is a Ugandan coin: 500 shillings.
Interview with trader in Ngauro market, 20.05.2015
Interview with community development officer, Department of Agriculture, CDO Office, Kapoeta town, 15.05. 2015
Interview with commissioner and acting executive director of Budi County, County HQ, 19.05.2015
Interview with the office manager of Budi County Commissioner, Chukudum County HQ, 19.05.2015
Interview with the town clerk of Kapoeta town, offices, 15.05.2015.
Interview with acting executive administrator and payam director of Pwato, administrator’s office, 14.05. 2015
Interview with head of PHCU, PHCU Karpeto, 27.02.2015.
Interview with Wonduruba miners and chief, payam HQ, 06.03.2015.
Interview with head of PHCU, PHCU Karpeto, 27.02.2015.
Interview with community development officer, Department of Agriculture, CDO Office, Kapoeta town, 15.05.2015.
Interview with acting director for agriculture, Kapoeta East, Narus, 18.05.2015.
Interview with acting director for agriculture, Kapoeta East, Narus, 18.05.2015.
Questionnaire response from county health officer Chukudum, Budi, 24.03.2015
Interview with chief, police and community members, Ngauro town, 20.05.2015
Interview with chief of Kit 1, Karpeto trade centre, 27.02.2015
Interview with payam head chief in Karpeto, 27.02.2015
Questionnaire response from chairperson of KADO, 24.03.2015
Interview with trader in Ngauro, market, 20.05.2015
121 Interview with head of PHCU and others, PHCU Karpeto, 27.02.2015
122 Interview with commissioner and acting executive director of Budi County, County HQ, 19.05.2015
123 Interview with acting executive administrator and payam director of Pwato, administrator's office, 14.05.2015
124 Interview with acting executive administrator and payam director of Pwato, administrator's office, 14.05.2015
125 Interview with head of exploration unit, PMP Directorate of Mineral Development, 23.02.2015
126 Interview with community in Anak-nak, Anak-nak, 16.05.2015
127 Interview with chairperson of KADO, Juba DPOC HQ, 03.03.2015
128 Interview with KADO members, SSLA, 04.03.2015
129 Interview with KADO members, SSLA, 04.03.2015
130 Interviews with the manager and founder of Great Ramciel International, Cordaid South Sudan offices, Juba, 01.04.2015 and 27.05.2015.
131 Interview with the acting payam administrator, Wonduruba HQ, 05.03.2015
132 Interview with the geologist of the CES Directorate of Mining, attached to Great Ramciel International Company Ltd., Juba, 15.04.2014.
135 The group's parent company is Equator Gold Holdings Limited, incorporated as a public company in Jersey. Founded in England in April 2011, Equator Gold underwent a corporate reorganization in June 2013 which established the holding company in Jersey. The English companies are now wholly owned technical services companies of the group.
137 Interview with CEO of Equator Gold, Cordaid offices in Juba, 04.03.2015
138 See Equator Gold Website: http://equatorgold.co.uk/
140 For more information on Kibali Gold Mine/Randgold see: http://www.randgoldresources.com/kibali-gold-mine
141 Equator Gold, ‘Finding Gold in South Sudan’, Presentation, 121 Mining Investment, Cape Town, February 2015,
142 Interview with the acting chief of the Dinka Ngok of the Abyei area of South Sudan, well known as Chief Deng Majok. He studied medicine in Italy, graduating in 1967, then moved to the UK to practice. He returned to Southern Sudan and was elected to the Regional Assembly, becoming the Deputy Speaker. In 1980 he was appointed Regional Minister of Health. He became a political prisoner in 1983 until released two years later to return to the UK as a political asylum-seeker. He practiced as a general practitioner in the Midlands and worked voluntarily as South Sudanese community leader in Birmingham and the UK in general. In 2000 he was granted a lifetime award by the Africa Community in Birmingham. Dr Bol Deng maintains strong connections in the new Republic of South Sudan and is a respected elder of the foreign diaspora. See: http://www.nkmining.com/about_us.html
144 For more information see: http://www.randgoldresources.com/kibali-gold-mine
147 Interview with CEO of Equator Gold, Cordaid offices in Juba, 04.03.2015
148 Community meeting in Ganji, Ganji HQ, 02.03.2015
150 Interview with acting executive administrator and payam director of Pwato, administrator’s office, 14.05.2015
151 Peter Adwok, a former minister in GoNU and important personality within SPLA/M, now SPLM-I.
152 Interview with the Project Geologist, NKEM, Juba Cordaid offices, 06.03.2015
153 Community meeting in Ganji, Ganji HQ, 02.03.2015
154 Interview with the project geologist, NKEM, Juba Cordaid offices, 06.03.2015
155 David K. Deng, Paul Mertenskoetter and Luuk van de Vondervoort, Establishing a Mining Sector in Post-Conflict South Sudan, USIP Special report, 2013, p. 14
156 Interview with the project geologist, NKEM, Juba Cordaid offices, 06.03.2015
157 The charitable donation of money and other resources made by corporations to non-profit organizations. Corporate philanthropy generally consists of cash donations but can also be in the form of use of their facilities or volunteer time offered by the company's employees. Donations are generally handled directly by the company or by a foundation it has created for the purpose. http://www.businessdictionary.com/definition/corporate-philanthropy.html
159 Interview with head of exploration unit in PMP Directorate of Mineral Development, Directorate, 10.03.2015
162 Maria Laura Barreto, Legalization guide for artisanal and small scale mining, ARM, 2011
163 Interview with acting executive administrator and payam director of Pwato, Administrator’s office, 14.05.2015
165 Many miners and communities explained how important it was for them to take gold to Uganda to sell in order to maintain family members who study abroad.
166 More ideas in: Compensation Matters – Securing community interests in large-scale investments, BICC and BFW, 2013
169 Interview with Head of PHCU, PHCU Karpeto, 27.02.2015
170 Interview with payam head chief Lobonok, chief's compound, 27.02.2015
171 Interview with Ktt 1 chief, Karpeto shopping centre, 27.02.2015
172 Interviews with communities' representatives and traders of Ganji payam in Ganji, 01-02-03.2015
173 Interview with Gorom village chief, chief's compound, 14.11.2015
174 Interview with acting payam administrator, payam HQ, 05.03.2015
176 Interview with community in Anak-nak, Anak-nak, 16.05.2015
177 Interview with acting executive administrator and payam director of Pwato, Administrator’s office, 14.05.2015
178 Interview with county paramount chief and Narus payam head chief, Narus County HQ, 18.05.2015
179 Questionnaire, County Health Officer, Budi County, 24.03.2015
180 Interview with the National Security Chief, Kapoeta town, 15.05.2015
181 Interview with chief, police and community members, Ngauro town, 20.05.2015
182 Interview with Budi County Commissioner, Chukudum, 19.05.2015
183 PKKH: 'After “black gold”, South Sudan eyes the real stuff’, http://www.pakistankhudahafiz.com/world-view/after-black-gold-south-sudan-eyes-the-real-stuff/, 03.06.2013
184 Interview with trader in Ngauro, market, 20.05.2015
185 Interview with trader in Ngauro, market, 20.05.2015
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